NANOG®

2021

Annual Report

North American
Network Operators'
Group

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Community, in its truest sense.

NANOG is, and always has been, dedicated to the dynamic people who make up our community.

NANOG®

OUR MISSION

NANOG is committed to the ongoing advancement of an open, secure, and robust Internet, by providing a platform that inspires, educates, and empowers our community to work together in building the Internet of tomorrow.

OUR CORE VALUES

We believe in working together to meet the ever-changing demands of a global network, while upholding our shared values of:

- Community
- Education
- Innovation
- Diversity
- Security

Through meetings, events, scholarships, fellowships, digital spaces, and social networks, we offer multiple ways for our community to:

- Meet and learn from other professionals working or studying in their field.
- Share the latest Internet technologies, and industry best practices.
- Form crucial peering arrangements.
- Discuss technical challenges faced by the industry.
- Have meaningful conversations about what's impacting their daily lives.
- Form strategic business relationships, and friendships with like-minded peers.

NANOG®

13,000+
INDUSTRY PROFESSIONALS
AND STUDENTS

20+
COUNTRIES AROUND THE
WORLD REPRESENTED

NANOG®
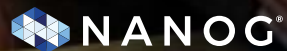
PEOPLE IN OUR COMMUNITY

WORK for ISPs of all sizes, content providers + multi-tenant data centers, hosting + cloud companies.

STUDY at the top engineering + computer science programs in the US.

COMPANIES WITH EMPLOYEES WHO ARE ACTIVE IN OUR COMMUNITY

- Apple
- Amazon
- Cisco
- Comcast
- Facebook
- Fujitsu
- Google

- Juniper
- Microsoft
- Netflix
- Nokia
- Twitch
- Twitter
- Verizon

CHAOS CREATES OPPORTUNITY

NANOG Community,

During the first half of 2020, the pandemic left us all scrambling. But, as the year waned, we began to find our footing. We not only transitioned to virtual events, but we also developed our virtual platform, which is better suited to the needs of our community. With that success and the perceived end of the pandemic on the horizon, we thought we had come out relatively unscathed. Then came the COVID variant, Omicron.

Thrust back into lockdowns and closures; we once again found ourselves being tossed about by the whims of COVID. Our response was to accept the things that we could not change and focus on what we could change. Our meetings team was able to renegotiate our hotel contracts to minimize losses. Regarding development, we made further improvements to our virtual platform and developed improved event management tools. We also created an in-house registration system to provide a better experience for our community and minimize third-party exposure to their data. We also formed committees to explore the creation of formal mentorship and educational programs. These programs will be crucial to the future growth of NANOG. Lastly, we were the first organization in our space to hold a hybrid meeting.

The pandemic has brought unforeseen challenges. And if last year has taught us anything, it's to expect the unexpected. Even though it is often painful and uncomfortable, challenges and chaos can often provide growth opportunities. We will always try to minimize uncertainty and prepare for the unknown, but it will never disappear. Uncertainty is part of the human condition.

Thankfully, those that came before us were thoughtful enough to provide reserve funding, allowing us to leverage the opportunities created by chaos. Overall, it was a year of growth and technological adaptation, which made a more vital infrastructure and foundation for our organization for years to come.

Edward McNair

NANOG Executive Director

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GATHERING WITH THE NORTH AMERICAN NETWORKING COMMUNITY

NANOG's tri-annual meetings draw individuals in multiple facets of network engineering, operations, and architecture. They gather with us in major cities across North America to share + learn about the latest Internet technologies and challenges; form peering arrangements; conduct business, and make meaningful connections with like-minded peers.

2021 continued to provide challenges in gathering face to face; however, NANOG found ways to meet them with a continued improvement in the virtual experience for NANOGs 81 + 82, then introduced a hybrid experience for NANOG 83.

NANOG

WORKING TOGETHER, FOR THE INTERNET OF TOMORROW

TRANSFORMING UNCERTAINTY INTO PROGRESS

The challenges of a post-pandemic climate of 2021 created a continued opportunity to be innovative, resilient + and creative in problem-solving.

NANOG continued to improve our robust virtual and hybrid meeting platforms to connect with our global audience. Despite the times, the NANOG staff, board of directors, and committees made improvements to some of the most critical aspects of our mission. NANOG adapted to the needs of a virtual and hybrid audience and transformed uncertainty into progress.

"What makes NANOG an incredible community also makes it intimidating - 'courageous women' helping you not feel small."

— **Jezzibell Gilmore**
PacketFabric
NANOG 83 "Courageous Women of NANOG"

2021 NANOG MEETINGS, AT A GLANCE

NANOG 81 - Virtual February 8-11, 2021

921 VIRTUAL REGISTRATIONS	186 PEAK VIEWERSHIP	55 HACKATHON PARTICIPANTS	13 NEW/RENEWED MEMBERSHIPS

NANOG 82 - Virtual June 14-16, 2021

758 VIRTUAL REGISTRATIONS	128 PEAK VIEWERSHIP	52 HACKATHON PARTICIPANTS	30 NEW/RENEWED MEMBERSHIPS

NANOG 83 - Hybrid Minneapolis, MN November 1-3, 2021

300 VIRTUAL REGISTRATIONS	312 IN-PERSON REGISTRATIONS	214 MEMBER REGISTRATIONS	2 STUDENT REGISTRATIONS
36 SPEAKERS	63 WOMEN IN ATTENDANCE (10%)		

*Please Note: NANOG 83 was the first hybrid of in-person and virtual attendees. Therefore, we adjusted our 'at a glance' to reflect the new meeting type.

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NANOG 81 VIRTUAL HIGHLIGHTS

NANOG 81 Virtual - To ensure our community's safety and well-being, the NANOG Board and Staff determined that the in-person component of NANOG 81 was not possible. Instead, we held our virtual meeting on Feb. 8-10, 2021.

NANOG 81 KEYNOTE SPEAKERS

A Brief History of Router Architecture

Introducing Tony Li, a Pioneer in Internet Routing for 30 Years, Helping to Scale the Internet Architecture

In this talk, we review the history of router architectures, complete with their flaws and benefits. From the earliest days of bus-based systems through to today's multi-chassis monstrosities, we will look at what went right, what went wrong and speculate about what is yet to come.

Securing Internet Applications from Routing Attacks

Introducing Jennifer Rexford, the Gordon Y.S. Wu Professor of Engineering and the Chair of Computer Science at Princeton University

Attacks on Internet routing are typically viewed through the lens of availability and confidentiality, assuming an adversary that either discards traffic or performs eavesdropping. Yet, a strategic adversary can use routing attacks to compromise the security of critical Internet applications like Tor, certificate authorities, and the bitcoin network. In this paper, we survey such application-specific routing attacks and argue that both application-layer and network-layer defenses are essential and urgently needed. While application-layer defenses are easier to deploy in the short term, we hope that our work serves to provide much-needed momentum for the deployment of network-layer defenses.

NANOG 82 VIRTUAL HIGHLIGHTS

NANOG 82 Virtual - To ensure our community's safety and well-being, the NANOG Board and Staff determined that the in-person component of NANOG 82 was not possible. Instead, we held a virtual meeting on Jun. 14-16, 2021.

NANOG 82 SPEAKERS

The Evolution of the Inter-planetary Internet

Introducing a legendary "Father of the Internet," Vice President + Chief Internet Evangelist for Google, Vint Cerf.

A renowned Internet Pioneer takes us into space to investigate "Solar System Internet." Cerf talks about the past, present, + future of the Internet for a truly "out of this world" presentation..

Gatekeeper: First Open Source DDoS Protection System

Speaker: Cody Doucette, Systems Engineer, Cloudflare
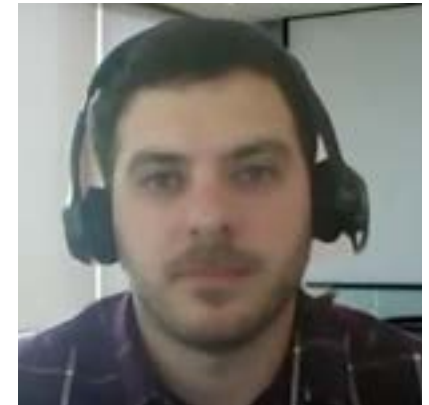
Distributed denial of service (DDoS) attacks are at the tipping point of everyone's top concern: (1) the peak capacity of DDoS attacks has been growing exponentially for years, (2) this trend is not slowing down, and (3) most attacks are not yet very sophisticated. While current DDoS protection systems have been able to match the peak capacity of attacks, they are brittle in the face of the increasing sophistication of attacks. In this talk, we introduce Gatekeeper, a DDoS protection system that scales to any peak capacity, delivers unparalleled multi-vector protection, and mitigates attacks in seconds.

NANOG 83 HIGHLIGHTS

NANOG 83 Hybrid - The NANOG Program Committee (PC) prepared their first hybrid program for NANOG 83, which took place in Minneapolis and via our online platform, November 1-3, 2021.

NANOG

NANOG 83 KEYNOTE SPEAKERS

# Who Really Controls the Internet? And Should They?

Introducing Bert Hubert, "Geeky Entrepreneur" + Seasoned Government Intelligence Cybersecurity Pro
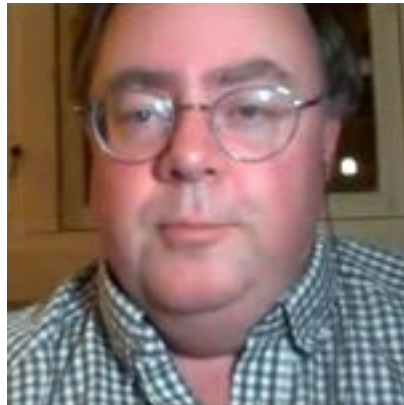
This presentation discussed how control of the internet experience is moving more and more into the hands of browser and phone vendors. The advent of end-to-end encryption, also on control planes and metadata like DNS, means that no one else is able to influence the Internet - except in an extremely heavy-handed and binary fashion. This moves a lot of agencies to browser and phone vendors, who now can decide if and how they want to help governments and societies or not. They could also enforce their own vision of what the Internet & society should be. If governments don't agree, they have to resort to heavy measures to impose their will, as we've recently seen happening in Russia.

IPv6 - The Next 10 years

Introducing John Brzozowski, Chief Technology Officer & Vice President, Product Engineering & Infrastructure
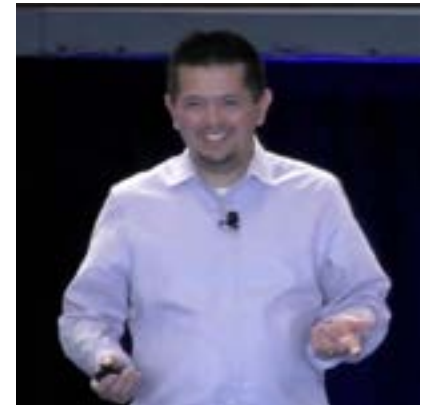
World IPv6 Day occurred in 2011 + World IPv6 launched in 2012. We will briefly reflect on the status of IPv6 deployment across eyeball and content networks ~10 years later. We will look at statistics across a wide range of public and private (cited) sources. In 2021 the cost of IPv4 address acquisition was increasing dramatically. We will take a close look at what has worked and what has not, across the board, focusing on what the next ten years of IPv6 need to look like: to not just increase adoption but to increase bonafide end-to-end usage.

"If you had asked anyone back in the year 2011 or so whether we would still be running IPv4 to support the Internet in 2021, I'm pretty sure that answer would be a very definite no! Ten years later when asked if we will still be using IPv4 on the Internet in 10 years from now, then the answer from Comcast's John Brzozowski is a surprising 'Yes!"

— Geoff Huston
Top Takeaways from NANOG 83 on Keynote: Ipv6: The Next 10 years

COMMITTED TO EVOLVING OUR DIGITAL INTERFACES

By developing a new registration system that met the needs of our target audiences and created the most efficient method for registering virtual + in person attendees.

When COVID hit we asked ourselves:

How do we keep our staff and community safe?

We are a community event organization – how do we maintain relevance?

Can we manage financially without events?

How long will the pandemic last?

Developments to NANOG's Virtual Platform:

- The ability to stream video from any platform
- Flexible display options
- Zoom integration
- Real-time chat
- Built-in Q+A
- Online Help
- Virtual Expo Booths
- Real-time polling through third-party support
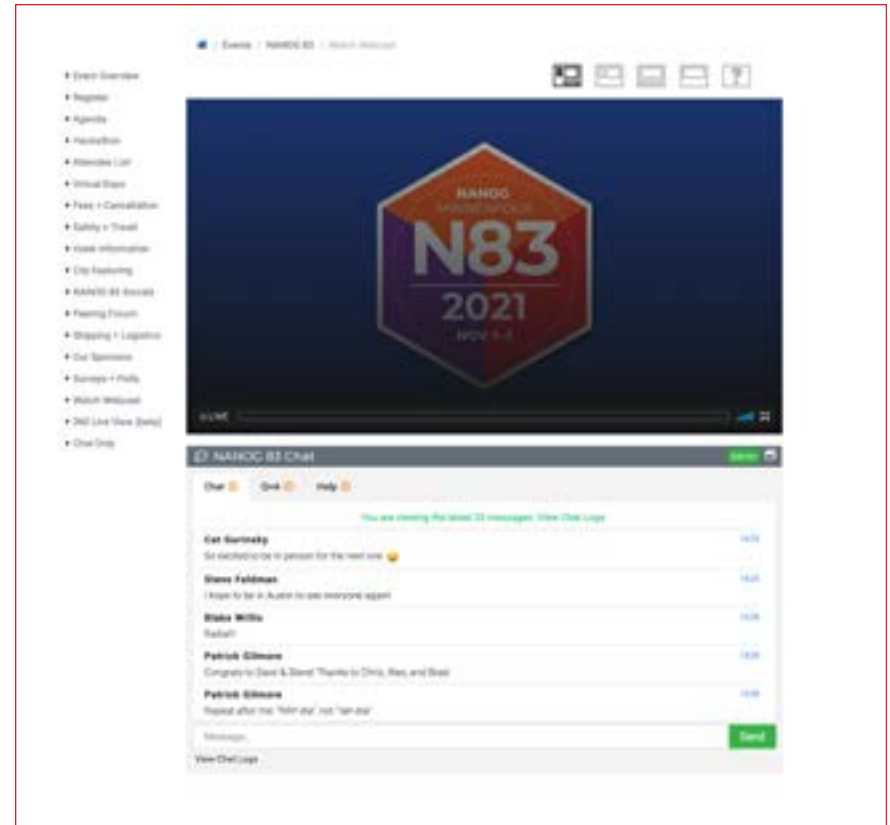
More Development:

- Event management system – with the option to support other industry events.
- Event registration system – supports in-person + virtual registrations, registrations of team members, membership purchases, renewals + donations.
- 360 live stream – to enable virtual attendees the sense of being at event.

COMMITTED TO PROVIDING THE BEST VIRTUAL STREAMING EXPERIENCE

By consistently improving + evolving our ability to connect with remote audiences, we were able to significantly improve the overall flow of programming during the virtual-only conferences at the beginning of 2021.

Event Production Pivots for 2021:

"Change is essential to any living thing."

A main focus of the virtual event streaming was:

How do we deliver a better experience for the speakers and the audience in the virtual environment?

Keeping in mind the lessons learned in 2020, which included:

- Having the timing of the content to fit within a standard business day of Eastern to Pacific time zones
- Pre-recording the presentations
- Having live Q&A sessions which allowed the audience to feel connected

The NANOG Program Committee (PC) felt there was still room to provide a better experience.

Introductions + Session Moderation:

In 2021, the NANOG PC:

Introduced more formalized speaker introductions to also include items such as

- Using previous meeting data to capture the number of times previously spoken
- Captured their first NANOG meeting speaking engagement
- Captured number of years as part of the NANOG Community

WORKING TOGETHER, FOR THE INTERNET OF TOMORROW

BROADENING OUR SCOPE

In addition to our long-standing memorandum of understanding with ARIN, we also signed agreements with ISOC + ICANN to improve outreach initiatives in North America.

- NANOG board assembled and tasked a committee to develop a mentorship program
- Reimagined our Hackathon to engage industry professionals + students better
- Utilized a virtual platform + set of virtual tools
- Re-Introduced themes for Hackathon
- Updated Hackathon "Recap" video to include interviews with participants + host
- Added an introduction session during the week before the hacking weekend

ENGAGING NEW AUDIENCES, INSPIRING CHANGE THROUGH MULTIMEDIA CONTENT + STORYTELLING

A digital-marketing strategy was implemented to amplify + connect voices within our community. The creative + content strategy included NANOG Stories blog, a video series + social media video content. The continued focus was to build brand awareness through narrative storytelling, promote in-person + virtual events, inform the community on outreach + education opportunities, and drive continued engagement on NANOG website, Youtube + social media channels.

- 13 new features since Jan 2021
- New content 2-3 times per month

- Ongoing updates to NANOG news feed
- Press release creation and dissemination

13
FEATURES

2-3
CONTENT ITEMS
PER MONTH

N NANOG®

46

NCAMPAIGNS

379

NEW SUBCRIBERS

25.07%

OPEN RATE
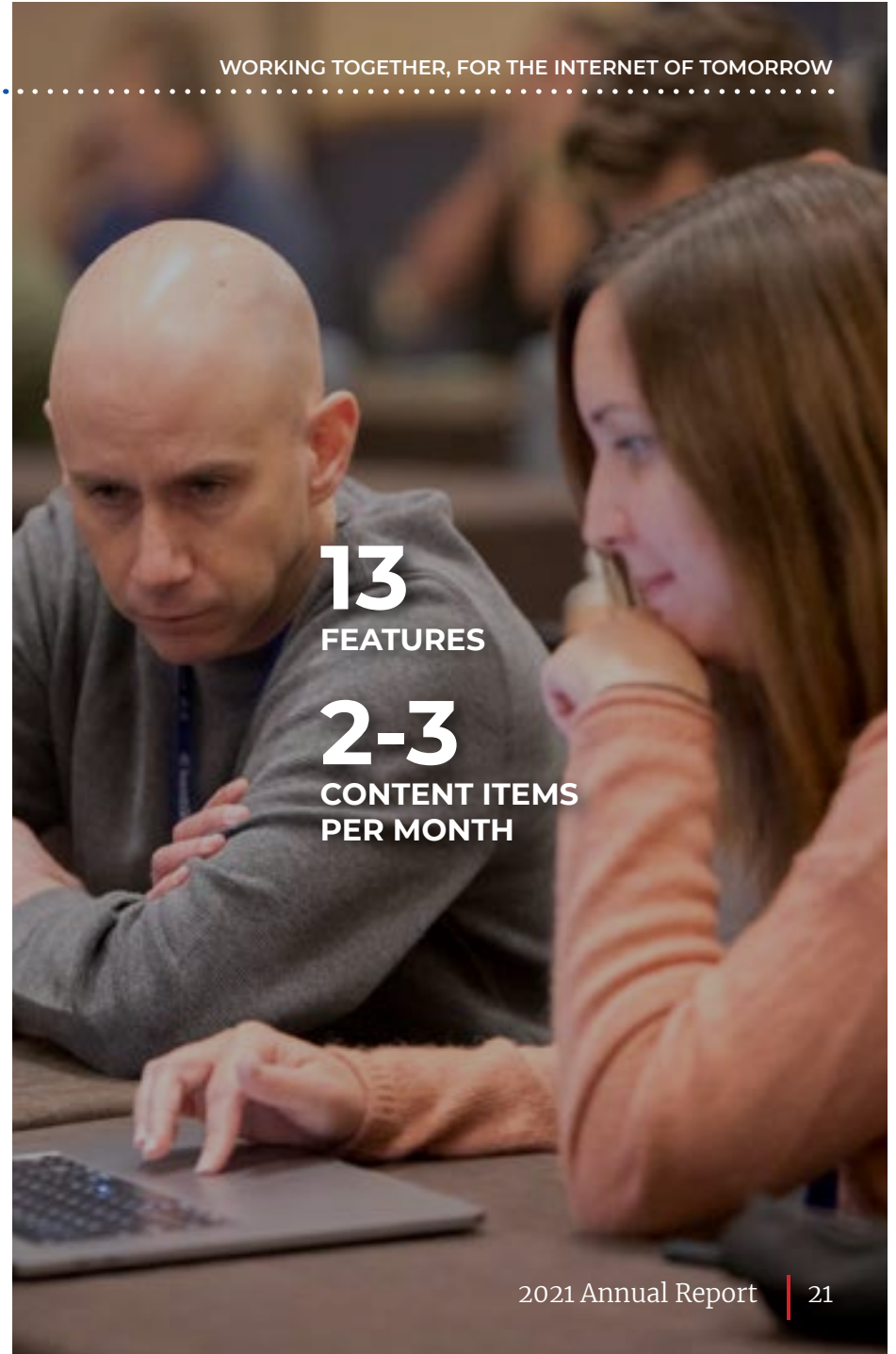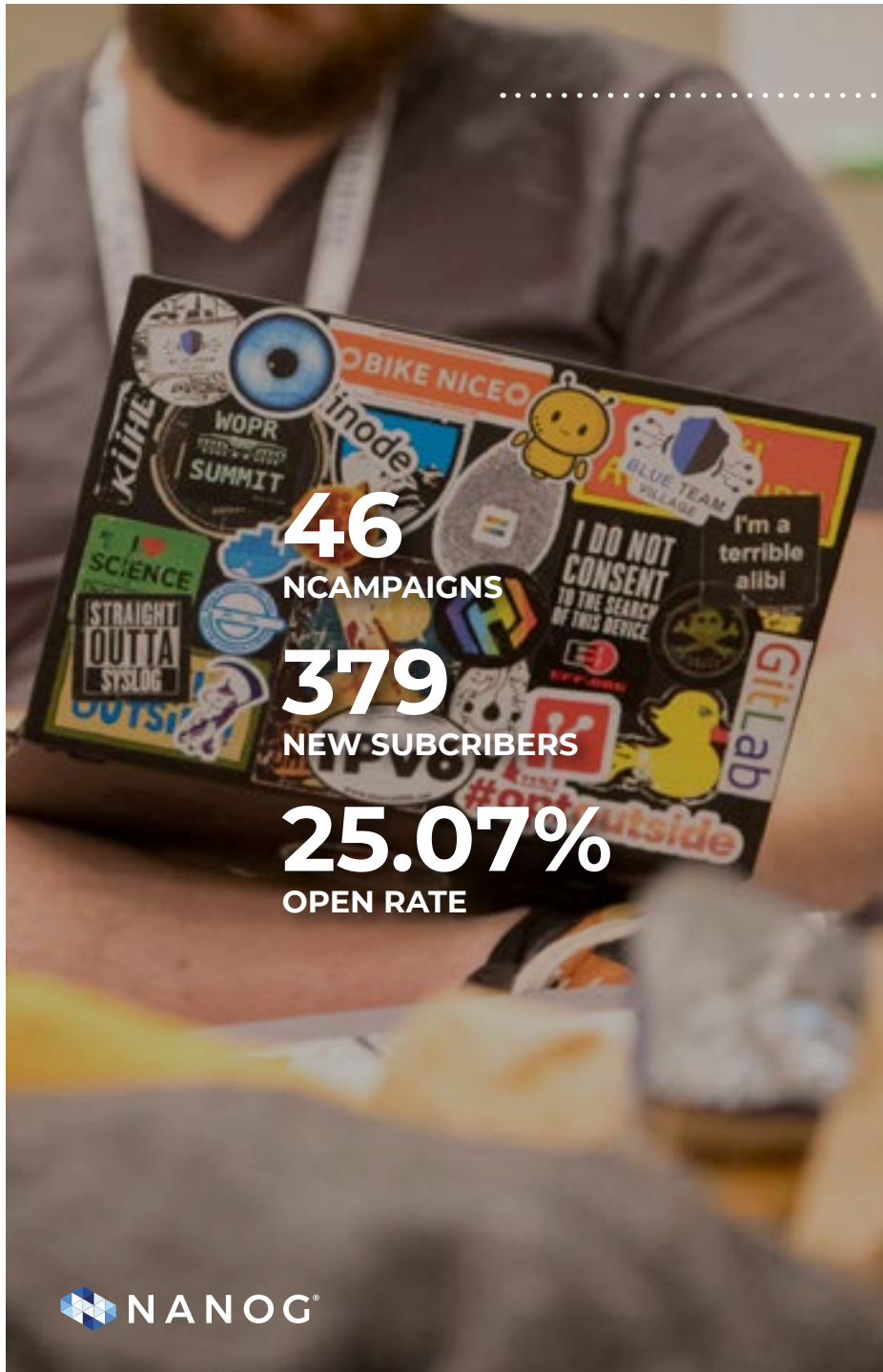
Planned, created, and executed meaningful content for NANOG digital-newsletter campaigns via Mailchimp to drive greater awareness of NANOG + our programs:

- 46 new campaigns since Jan 2021
- 379 new subscribers / 618 total
- Promoted subscription organically via social media, digital marketing, and website capture (sign-up form)

- 25.07% open rate (3.74% higher than the "all-industry" average)
- About 4% average click rate (1.3% higher than the "all-industry" average)
- Subscription opt-in added to the event registration form

Ongoing Strategy + Management of NANOG Social Media:

Twitter, Facebook, LinkedIn, and Instagram. Two of the top-performing posts of 2021 reached more than 2.7k people + featured clips from our new series "Internet Innovators."

Instagram

122 new followers / 647 total

165 new posts since Jan. 2021

Created first Instagram reel to reach younger demographics

Facebook

232 new page likes / 1,848 Total Followers

2 top-performing posts had 1,271 post impressions + post reach 1,173 + post engagement 203

2 of the top-performing video posts of 2021 were viewed by 2.7K people + featured clips from our new series "Internet Innovators"

LinkedIn

1,030 new followers / 4,250 total

6.87% average engagement rate (4.87% higher than average)

21K average impressions per post

LinkedIn Community Group

9,393 members

Twitter:

6,716 Followers

465 annual mentions

28K average monthly tweet impressions

29K average monthly profile visits

LinkedIn Polls to Inspire Community Feedback.

In order to better understand our community and implement interaction, we began asking for feedback via LinkedIn Polls

13
NEW FEATURES
SINCE JAN 2021

2-3
NEW CONTENT
TIMES PER MONTH

MEANINGFUL NEWSLETTERS, BLOGS, INTERACTIVE POLLS, + ENGAGING SOCIAL MEDIA

Top Quotes from 2021 Blogs:

"Start with why. I learned to think creatively when developing network solutions and solving operational issues. Always start with the 'why'. Think about the big picture and possible dependencies."

"5 Career Game-Changers for the New Year" | NANOG PC + Charter Communications Sr. Director of Advanced Engineering, Ognian Mitev

"Universities are sometimes "ahead" of industry in teaching new ideas and theoretical concepts, but many of these theories will never work in the real world. Make sure you can apply your knowledge and skills in the real world."

"Future Engineers: Stay Ahead of This Curve" | Levi Perigo, CU Boulder Professor of Network Engineering.

"Virtual presentations will have an additional source of questions, as there will be a live audience component."

NANOG Embraces Hybrid Meetings

"Working on my @nanog keynote. It will upset everyone.
Just different people at different times."

— Bert Hubert
*Keynote "Who Controls the
Internet and Should They?"*

VIDEO IS KEY TO OUTREACH

By 2022, 82% of the global internet traffic will come from streaming videos and downloads (Cisco)

- One-third of all online activity is spent watching videos (WordStream)
- 85% of the internet audience in the US watches videos online (Statista)
- Online video consumption has increased across all age groups in the last 5 years but the largest increase is seen in people over 46-years-old (Limelight)
- 78% of people watch online videos every week, and 55% view online videos every day. In fact, that 54% of consumers want to see more video content this year (Social Media Week)

- Studies show that 54% of consumers want to see more video content from a brand or business they support (HubSpot, 2018)
- 72% of customers said they would rather learn about a product or service by way of video. In fact, 84% of people say they've been convinced to buy a product or service by watching a brand's video (Optinmonster).
- Viewers retain 95% of a message when they watch it in a video, compared to 10% when reading it in the text (Insivia)

NANOG made a focused effort to produce more video content to engage + connect both new + old audiences.

18,200+
YOUTUBE SUBSCRIBERS

12,311,400+
YOUTUBE VIEWS
SINCE JUNE 2013
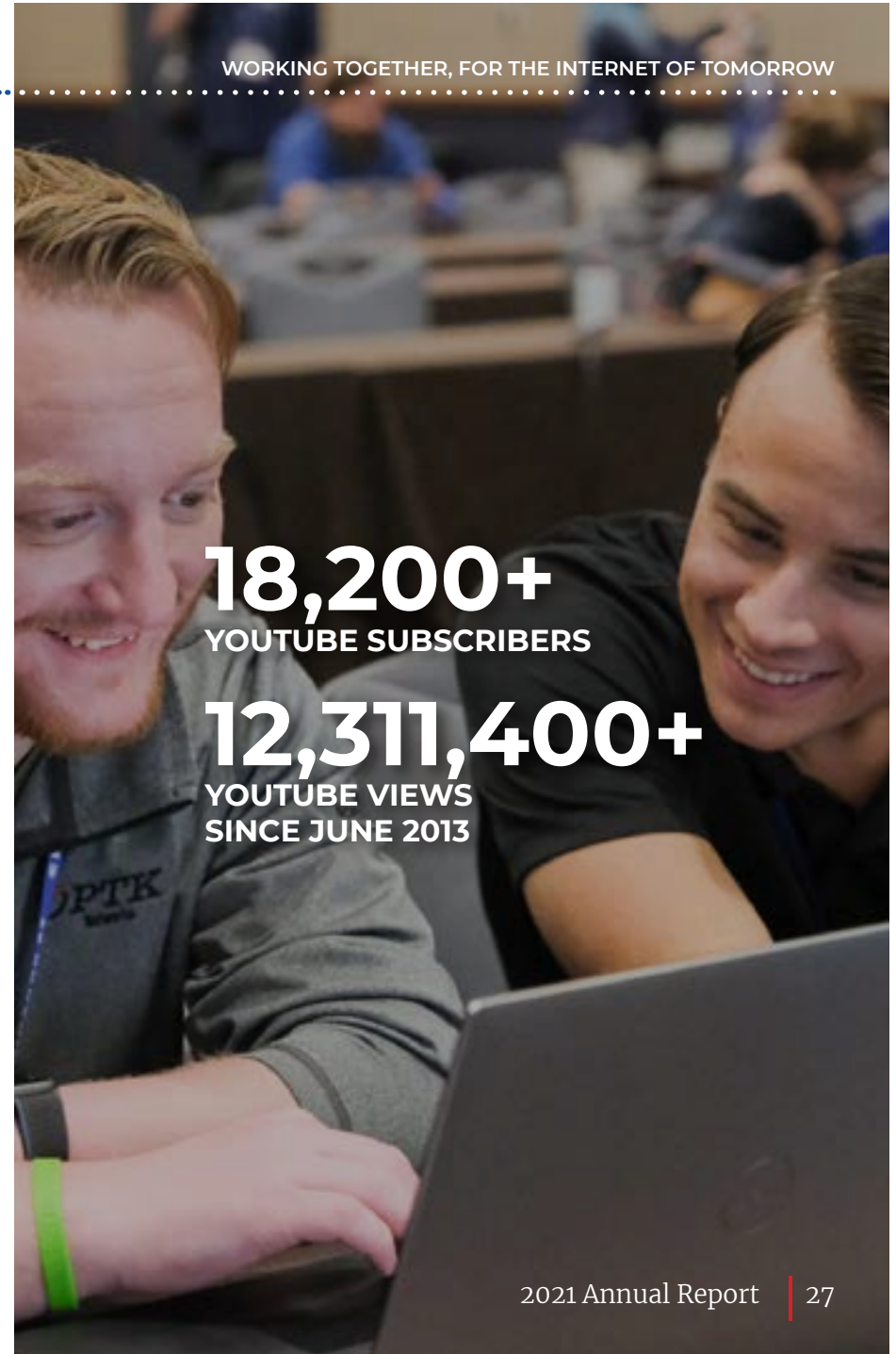
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INTERNET INNOVATORS

New Video Series: We launched Season 1 of a new video series called Internet Innovators.

- Description: NANOG interviews the boldest and brightest tech legends of our time to give them a platform to tell their story and our Internet history. The series looks at the past, present, and future of the Internet and talks to the innovators who were actually there.

- Video Social Media Content: Each episode includes an estimated 1 min. Soundbite to tease the full episode that played across Twitter, LinkedIn, Instagram + Facebook.

- Format/Medium 2021: In adaptation to the times, the season was recorded via zoom and then later produced into hour-long episodes. The series is human-interest, focused on the men and women behind the technology rather than the technology. The interviews were hosted by our NANOG content producer, seasoned in broadcast journalism and video production. The full episodes are available on Youtube + NANOG TV.

- 2021 Guest List: The incredible industry guest list of legendary Internet Pioneers included Vint Cerf, Geoff Huston + Scott Bradner.

INCREASING ACCESS TO OUR TOOLS, RESOURCES, AND PROGRAMMING

A webinar series was developed in 2020 that launched in Jan. 2021. While the monthly webinars didn't kick off until Jan. 2021, the overall concept was conceptualized in 2020.

NANOG produced more webinars in 2021 than ever before.

DNS Fundamentals
January 22, 2021

BGP Fundamentals
Feburary 26, 2021

Tribal Communications During the COVID Pandemic
March 19, 2021

State of Routing Security and RPKI Introduction
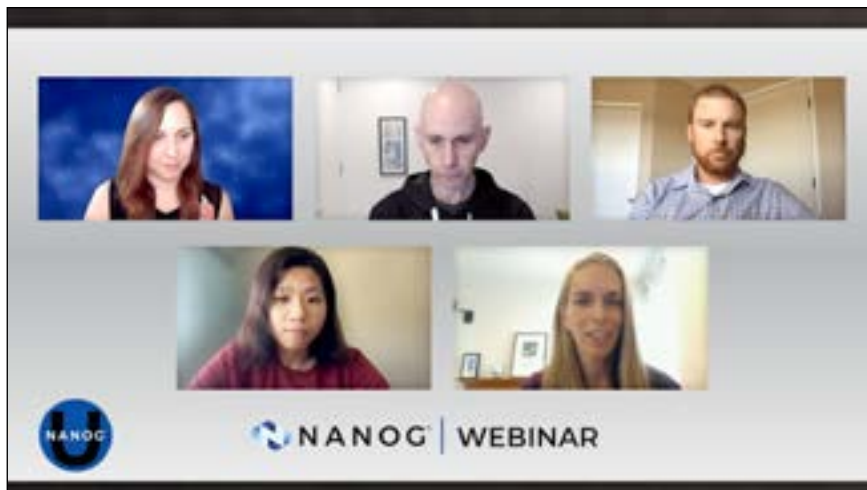May 20, 2021

Connecting California Universities to the World
September 16, 2001

Network Automation Panel Discussion
December 10, 2021

"Amazing… I'd like my team to watch it" on Internet Innovators featuring Geoff Huston

— **Fernando Gont**
    Director of Information
    Security at EdgeUno

INSPIRING AND EDUCATING THE NEXT GENERATION OF NETWORKING PROFESSIONALS

By providing a platform that engages more students, women, and people of color in our scholarships and educational programs.

2021 NANOG Scholarships

Scholarships were awarded to four exceptional undergraduate and graduate students from across North America, who are all eager to play a critical role in shaping our rapidly changing Internet ecosystem.

Abha Ahuja Scholarship – $10,000

Esu Ekeruche, Texas A&M University. Major: Electrical Engineering.

Wendy Ruan, University of Illinois at Urbana-Champaign. Major: Computer Science.

John Postel Scholarship – $10,000

Juan Perez, Georgia Institute of Technology. Major: Computer Science.

Charly Guttierrez Jimenez, Florida International University. Major: Engineering.

Esu Ekeruche
Texas A&M University

Wendy Ruan
University of Illinois at Urbana-Champaign

Juan Perez
Georgia Institute of Technology

Charly Guttierrez Jimenez
Florida International University

"Throughout my freshman year, I struggled to complete my computer science curriculum with my current laptop, but I did not have the funds to replace my device. With the help of this scholarship, I am now able to continue my studies with fewer worries on my mind. Thank you, NANOG!"

— **Wendy Ruan**
University of Illinois at Urbana-Champaign

IN MEMORY OF SUSAN FORNEY

With heavy hearts, we announce that a long-time member of the NANOG community and a board member, Susan Forney passed away in 2021.

Susan was a friend, colleague, mentor, and cherished member of our community. As a female engineer in a male-dominated field, she was a pioneer and a mentor who paved the way for many other women to follow.

Many will remember her for her kind, warm disposition and her infectious laugh and beautiful smile.

She was passionate about her community and helping others. Susan dedicated much of her time to mentoring engineers and becoming a leader for Women in Tech. She left an impression upon all that knew her. Susan was a truly lovely human being. It is an extreme loss to our community.

Susan is survived by her husband, Fearghas McKay, and two sons and a daughter, Ian St. Clair, Magnus McKay Møller, Victoria Forney, and daughter-in-law Lauren St. Clair. She is also survived by two sisters and a brother, Betty Geffre, Laura Scofield, and Richard Taylor, as well as her previous spouse, Samantha Forney.

Our deepest condolences go out to her family and loved ones. Susan will be missed by all who knew her.

BRINGING OUR COMMUNITY'S IDEAS TO LIFE

We continued to evolve NANOG's programming — a critical aspect of the mission-centered tools, resources, and education we offer. Presented by some of the brightest minds in our industry, every NANOG conference is built around hours of peer-reviewed talks, tutorials, keynotes, and panels.

Made up of industry experts who volunteer their time, the NANOG Program Committee (PC) is dedicated to ensuring NANOG's best-in-class content continues to evolve as the industry rapidly changes.

Over the past year, the NANOG PC worked to deliver three successful programs at NANOG 81, 82, 83.

The NANOG PC additionally:

- Hosted a Community Meeting at every NANOG conference, to provide all members of our community the chance to share their ideas and concerns.
- Further developed the sub-committee structure to help secure the highest quality speakers + promotion in advance of every conference.
- Improved program flow with formalized speaker introductions.
- Improved the onboarding process for new PC members.

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WORKING TOGETHER, IN SERVICE OF OUR COMMUNITY

NANOG's leadership team has extensive nonprofit and tech-sector experience, plus broad expertise in each of their respective disciplines: executive leadership, programming, event planning, design, marketing, content strategy, and business development.

Edward McNair
Board Member
Executive Director

Claudia Bristol
Controller + HR

Leigh Brooks
Senior Designer

Elizabeth Drolet
Multimedia Story Producer

Darrieux Harvey
Meeting + Events Director

Shawn Winstead
Business Development Specialist

Valerie Wittkop
Program Director

OUR BOARD OF DIRECTORS

NANOG's property, affairs, and business are managed and controlled by members who make up our BoD, which facilitates communications between the NANOG community and other like-minded organizations. Elected members of the BoD are also responsible for appointing all members of NANOG's committees, and the Executive Director.

Learn more about the board's full responsibilities.

Tina Morris
Board Chair

David Siegel
Vice Chair

Vincent Celindro
Treasurer

Steve Feldman
Secretary

Edward McNair
Board Member
Executive Director

Patrick Gilmore
Board Member

Benson Schliesser
Board Member

Cat Gurinsky
Program Chair

"If someone told me seven years ago that I would have pursued computer networks, I would have told them they were lying."

— Cynthia Muchiru
Mawingu Networksnet
Supporting Women Technologists + Expanding Internet in Kenya

WORKING TOGETHER, FOR THE INTERNET OF TOMORROW

2021 ELECTIONS, AT A GLANCE

As a 501(c)3 organization, our members vote to elect NANOG's Board of Directors (BoD), ensuring we continue to remain in service of our community, and dedicated to providing the resources and experiences that matter most to our community.

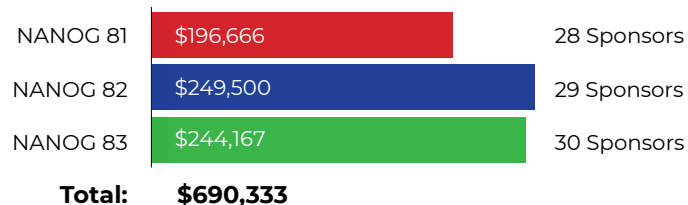In 2021, NANOG held the annual election in November for board of directors:

Board of Director Candidates, Election Results + Certified Results Documentation

During the one-month nomination window, five candidates ran for two positions on the BoD. The NANOG Election Committee, which includes 5 members, oversaw the election process, which was open for 52 hours. Elected board members were Dave Siegel and Steven Feldman.

NANOG SPONSORSHIP IN 2021

2021 Sponsor Revenue

NANOG 81	$196,666	28 Sponsors
NANOG 82	$249,500	29 Sponsors
NANOG 83	$244,167	30 Sponsors
Total:	**$690,333**	

New Sponsors: 8

Clearcable, Console Connect, DataBank, DriveNets, ISOC, T-Mobile, Team Cymru, Telescent

Diamond Sponsors: 1

Fastly

Platinum Sponsors: 2

ARIN, AWS

Gold Sponsors: 1

Verisign

Beer 'n Gear Sponsors: 5

DriveNets, Juniper Networks, NetScout, Nokia, Precision Optical

Virtual Expo Sponsors: 23

Adva Optical, AWS, Charter Communications, Clearcable, Comcast, Corero, DriveNets, Fastmetrics, Itential, JPIX, Juniper Networks, Kentik, Microsoft, Myriad360, NetScout, Nokia, PacketFabric, Precision Optical, Solid Optics, T-Mobile, Team Cymru, Windstream Wholesale, XKL

NANOG U Educational Partners

Netflix, QTS, Telstra
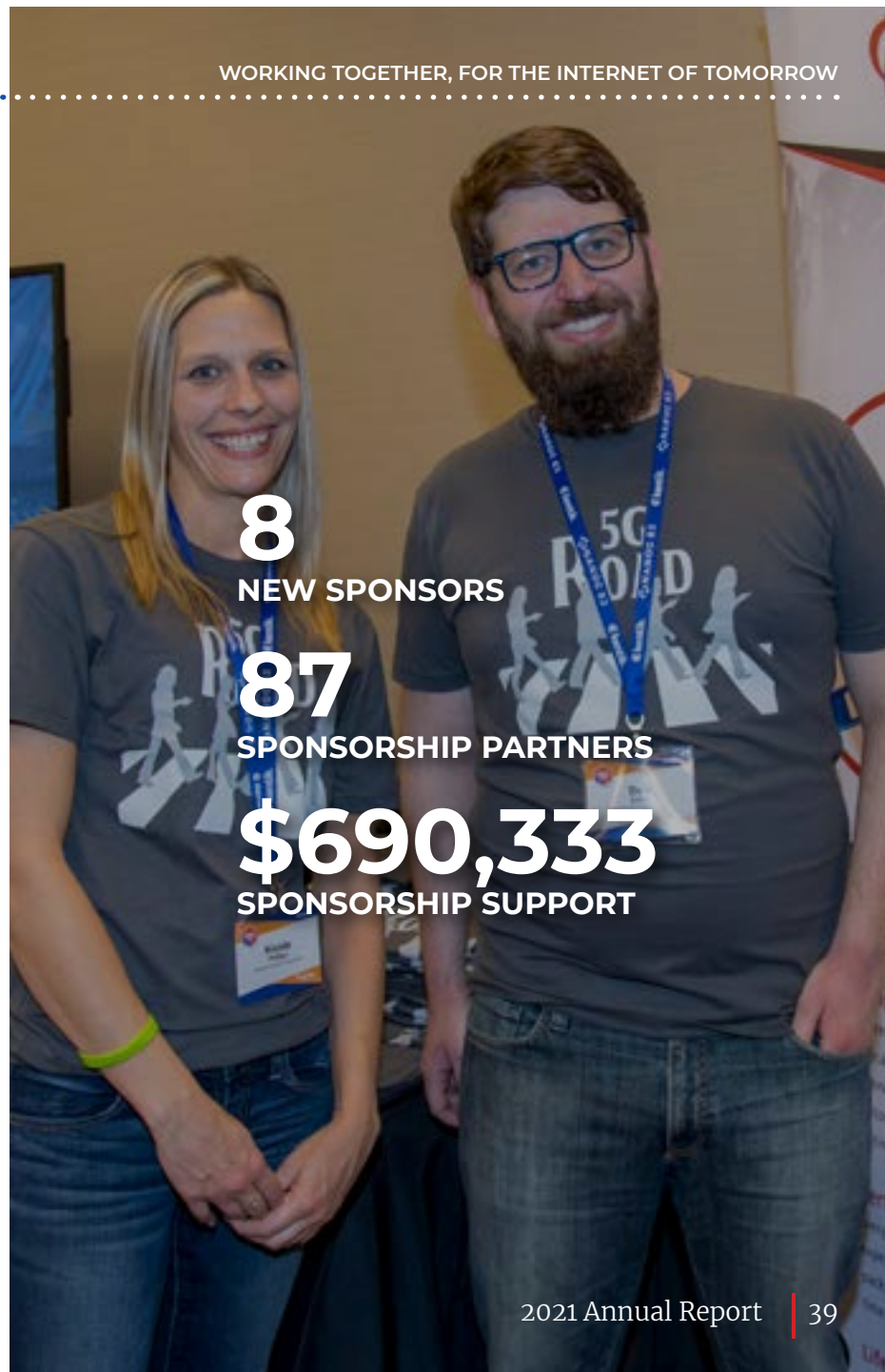
WORKING TOGETHER, FOR THE INTERNET OF TOMORROW

8
NEW SPONSORS

87
SPONSORSHIP PARTNERS

$690,333
SPONSORSHIP SUPPORT

FINANCIAL HIGHLIGHTS

The aftermath of the pandemic in 2020 resulted in a continued decrease in revenues for a second year (2021). This made liquidation of a portion of the investment reserves necessary to meet operating expenses.

2021+2020 Comparative Highlights:

- The 2021 total revenues, which included $256,395 from PPP loans, were still $539,781 less than 2020
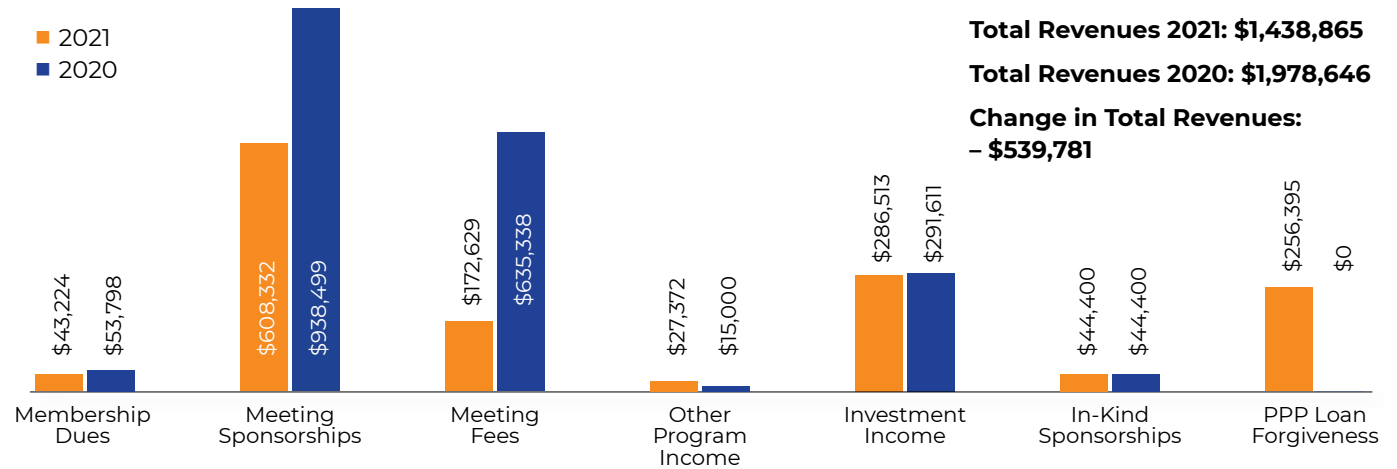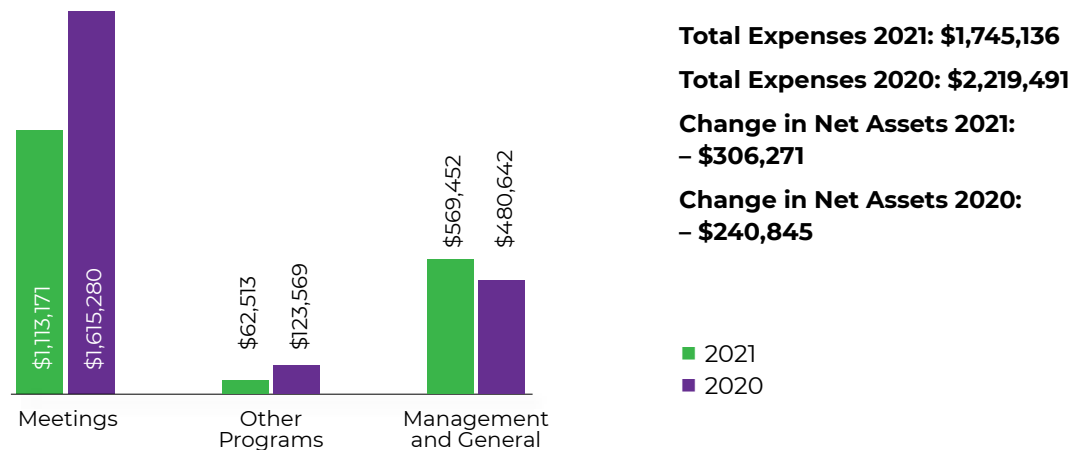- Correspondingly, with lower revenues, the 2021 operating expenses decreased by $474,355
- Cash available at yearend was $729,399, which was $132,574 more than 2020 yearend
- Investments: $3,562,895 decreased by $477,351

2021 Revenue vs. 2020 Revenue

■ 2021
■ 2020

Membership Dues	Meeting Sponsorships	Meeting Fees	Other Program Income	Investment Income	In-Kind Sponsorships	PPP Loan Forgiveness
$43,224	$608,332	$172,629	$27,372	$286,513	$44,400	$256,395
$53,798	$938,499	$635,338	$15,000	$291,611	$44,400	$0

Total Revenues 2021: $1,438,865

Total Revenues 2020: $1,978,646

Change in Total Revenues: – $539,781

2021 Expenses vs. 2020 Expenses

Meetings	Other Programs	Management and General
$1,113,171	$62,513	$569,452
$1,615,280	$123,569	$480,642

■ 2021
■ 2020

Total Expenses 2021: $1,745,136

Total Expenses 2020: $2,219,491

Change in Net Assets 2021: – $306,271

Change in Net Assets 2020: – $240,845

NANOG, Inc.

Statement of Financial Position

December 31	2021	2020
Assets		
Current Assets:		
Cash and Cash Equivalents	729,399	596,825
Investments	3,562,895	4,040,246
Accounts Receivable	92,000	35,000
Prepaid Expenses	172,265	117,892
Total Current Assets	**4,556,559**	**4,789,963**
Equipment and Technology, net	355,472	228,120
Total Assets	**4,912,031**	**5,018,083**

Liabilities and Net Assets

	2021	2020
Current Liabilities		
Accounts Payable	61,401	19,695
Deferred Revenue	752,633	497,320
Total Current Liabilities	814,034	517,015
Long term liabilities		
Paycheck Protection Program Loan	0	126,800
Total Liabilities	**$814,034**	**$643,815**

Net Assets

	2021	2020
With Donor Restrictions	30,000	0
Without Donor Restrictions		
Undesignated	2,551,799	3,002,662
Designated for Future Meeting Commitments	1,516,198	1,371,606
Total Net Assets	4,097,997	4,374,268
Total Liabilities and Net Assets	**$4,912,031**	**$5,018,083**

Statement of Activities

December 31	2021	2021
Operating Revenues:		
Membership Dues	43,224	53,798
Meeting Sponsorships	608,332	938,499
Meeting Fees	172,629	635,338
Other Programs Income	57,372	15,000
Interest and Dividend Income	96,749	94,808
In-Kind Sponsorship	44,400	44,400
Total Operating Revenues	**$ 1,279,101**	**$ 1,781,843**

Expenses

	2021	2021
Program Services:		
Meetings	1,113,171	1,615,280
Other Programs	62,513	123,569
Total Program Expense	**$ 1,175,684**	**$ 1,738,849**
Supporting Services		
Management and General	569,452	480,642
Total Operating Expenses	**$ 1,745,136**	**$2,219,491**
Change in Net Assets from Operating Activities	(466,035)	(437,648)

Nonoperating Activities

	2021	2021
Net Investment Return	189,764	196,803
Change in Net Assets	**(276,271)**	**(240,845)**
Net Assets, Beginning	**4,374,268**	**4,615,113**
Net Assets, Ending	**$4,097,997**	**$4,374,268**

Thanks!

WE COULDN'T HAVE DONE IT WITHOUT YOU

Our success depends in large part on the support of individuals and organizations who believe in our mission-critical programs and initiatives.

Your support in 2021 helped us continue our work in the service of advancing an open, secure, and robust Internet, by educating, empowering, and inspiring our community to meet the ever-changing demands of a global network.

NANOG®