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The Pew Charitable Trusts TOULSU

How to Unlock More Housing

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Home prices and rents are at historic highs. Pew looks at why-and the remedies.

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35,000

Americans contract more than 2.8 million antibiotic-resistant infections every year and at least 35,000 die.

Pew's antibiotic resistance project seeks to spur creation of new antibiotics by removing economic obstacles that impede discovery and development and to ensure that antibiotics are prescribed appropriately.

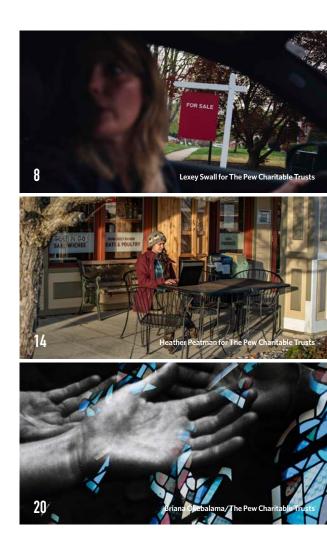
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Cover: Cara Bahniuk/The Pew Charitable Trusts



Founded in 1948, The Pew Charitable Trusts uses data to make a difference. Pew addresses the challenges of a changing world by illuminating issues, creating common ground, and advancing ambitious projects that lead to tangible progress.

In Service to What's Essential



For more than 75 years, The Pew Charitable Trusts has worked to understand what communities need to thrive, who is missing out and why, and how to lower barriers that keep success out of reach. This issue of *Trust* takes a close look at some of these essentials: safe and affordable housing, access to high-speed internet, and, for many people, a sense of spirituality.

Few things are more essential than having a roof over our heads. Housing provides stability and safety and is often linked to other quality-of-life issues, including being able to live close to work and send children to a good school. But today, housing has become unaffordable for many families. Between 2019 and 2022, the median price of a house jumped 25% in the United States. And over the last seven years, rents have skyrocketed 30%. As Alex Horowitz, a project director for Pew's housing policy initiative, notes in this issue of *Trust*, "Americans are struggling to afford housing because housing costs are rising to the highest levels we've ever seen."

Analyses by Pew and others have found that strict landuse regulations have limited the availability of housing, and burdensome financial policies have prevented many creditworthy homebuyers—including Black, Hispanic, and Indigenous people, and those in rural areas— from obtaining mortgages. This has led more than 35 million Americans to turn to risky forms of financing. As for rents, the higher they go, the more difficult it becomes to save for a down payment on a house.

But some cities and states are finding real solutions. Houston, for example, added 10.2% to its housing stock between 2015 and 2023 by reducing its minimum lot size, and Minneapolis reformed its zoning policies, including allowing more apartments as well as duplex and triplex construction on all residential lots. This increased new housing stock helped hold rents steady, and decreased homelessness.

Housing has always been one of life's essentials, but other elements of our basic civic infrastructure are relatively new, like high-speed internet. Today, 24 million Americans still don't have this modern necessity—either because no broadband network reaches them, or they can't afford the cost. High-speed internet is more than a convenience—it's essential to understanding and addressing health issues, succeeding in school and work, responding to local and national emergencies, and staying in contact with friends and family. Kathryn de Wit, who leads Pew's broadband access initiative, explains that "this is really an equity issue. Affordable broadband democratizes opportunity." She cites Pew Research Center data showing that 43% of adults making less than \$30,000 annually lack broadband, and 49% of households earning less than \$50,000 a year have trouble affording internet service.

Pew has played an active role in helping expand access to high-speed internet, bringing together state and federal broadband officials, digital equity advocates, industry experts, and academic researchers to discuss how to better deliver internet services. The federal Infrastructure Investment and Jobs Act of 2021 includes \$42 billion to expand high-speed internet networks, with subsidies to help low-income households pay for broadband. Pew has conducted education and training programs—at no cost—to 35 states and territories to help them make good use of the new federal funding.

Broadband brings people closer to each other and helps us understand each other. And as Pew Research Center reports in "Spirituality Among Americans," many in this country also feel an essential need to connect to a larger spiritual world. Based on a survey of 11,201 respondents in the nationally representative American Trends Panel, the Center found that 7 in 10 U.S. adults call themselves spiritual—including 22% who say they aren't religious. The findings come as the share of the Christian population in America is shrinking, and the number of people without a religious affiliation is growing. The survey asked a range of new questions to better learn about how people define and view spirituality, which will form the basis for additional Center research on this subject in the coming years.

That research illustrates a particular essential for Pew: data. It is the foundation of everything we do. It keeps us nonpartisan. It keeps us accurate. It keeps us humble. And as this issue of *Trust* demonstrates, it keeps us informed about the ever-changing trends in American life—and how we can make lives better for our communities.

Susan K. Urahn, President and CEO

Trust

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THE BIG PICTURE

Two-week-old Yacaré caimans stick their necks out in the Pantanal, the world's largest freshwater wetlands. The South American flooded plains are a gigantic nursery for aquatic life—such as these alligator relatives and, when the waters recede, for flocks of birds and mammals that feast on the dry land's rich offerings. The Pantanal and the neighboring region of Gran Chaco Forest provide refuge and migration routes to countless wildlife species, such as the jaguar, giant anteater, giant river otter, maned wolf, and tapir. A new collaboration among The Pew Charitable Trusts and the region's national, local, and Indigenous governments aims to preserve the rich landscape that spans 305 million acres across parts of Argentina, Bolivia, Brazil, and Paraguay by 2027.

Luciano Candisani/Minden Pictures

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NOTEWORTHY



A colony of penguins—including macaroni penguins, identifiable by their bright-yellow crest feathers—cavorts on Zavodovski Island, which is home to several species of these aquatic flightless birds. MZPHOTO.CZ/Shutterstock

Expanded Protections for a Biological Hot Spot

BY DEMETRA APOSPOROS

On a map they may appear as a collection of remote and rocky outcrops at the bottom of the world, but up close South Georgia and the South Sandwich Islands are teeming with wildlife, as are the frigid and nutrientdense southern Atlantic Ocean waters surrounding them. A deluge of whales, seals, and birds—tens of millions of them, including the world's largest penguin colony of 1 million breeding pairs of chinstrap penguins on Zavodovski Island—floods the region, a biological hot spot supporting one of Earth's largest and most varied aggregations of animals.

To recognize the area's significance, on Feb. 26 the U.K. and local governments announced a vast expansion of the marine protected area (MPA) around these islands, adding 64,000 square miles (166,000 square kilometers) of full protections to this part of the southern Atlantic. The decision, which was reached after a five-year scientific review of the MPA, was announced at London's Blue Belt symposium; it brings the entirety of the MPA around the islands boasting full marine protections—meaning no extractive or destructive activities are allowed—to 173,000 square miles (450,000 square kilometers). This will forever safeguard the area's important whale migration routes and penguin foraging habitat from human activities such as fishing and tourism. Through this commitment, the U.K. government and its overseas territories have once again illustrated global leadership in marine conservation. Five huge expanses of water under U.K. jurisdiction, also including Pitcairn and Tristan da Cunha, each now boast over 30% of their waters under full legal protection—a benchmark in effective marine conservation.

The Pew Bertarelli Ocean Legacy Project, a partnership with philanthropist and ocean advocate Dona Bertarelli, made key contributions to the review process through targeted communications and by sponsoring science detailing the return of baleen whales and the regional impacts of climate change. The project took this action as a member of the Great Blue Ocean coalition in recognition of the region's global importance and abundance of wildlife. The coalition also includes the Blue Marine Foundation, Greenpeace UK, the Marine Conservation Society, the Royal Society for the Protection of Birds, and the Zoological Society of London. This work was also supported by the Blue Nature Alliance, Bloomberg Ocean Initiative, Oceans 5 (which is a sponsored project of Rockefeller Philanthropy Advisors), and Whale and Dolphin Conservation.

The area is home to most of the world's Antarctic fur seals, about half of all southern elephant seals, an array of albatross species, and a host of cetaceansincluding sei whales, fin whales, minke whales, blue whales, sperm whales, and southern right whales. In addition, these waters are an important bellwether for analyzing the effects of climate change, and full protection supports a critical scientific analysis of the effects from a changing climate not only in these waters, but also in the wider Southern Ocean region stretching to Antarctica.

"Amid the dual threats of climate change and biodiversity loss, expanded protections in South Georgia and the South Sandwich Islands are a pivotal step toward safeguarding a global wildlife hot spot," said Johnny Briggs, who leads the Pew Bertarelli Ocean Legacy Project's work in U.K. waters.

The decision marks important progress. "The health of our planet and its people is inextricably linked to the health of our oceans," said Dona Bertarelli. "This commitment demonstrates huge foresight and ambition—applying a precautionary approach to conservation at a time of increasing environmental degradation and commercial interest in the Southern Ocean. By taking decisive action, the U.K. is setting a bold example for the world by committing to highly protect over 30% of South Georgia and the South Sandwich Islands, safeguarding the essential ecosystems that sustain us all."

Art With a View on History

An exhibition featuring work from more than two dozen contemporary artists of Korean descent, "The Shape of Time: Korean Art After 1989," explores pieces from a generation—born between 1960 and 1986 who lived through South Korea's transition from an authoritarian regime to current democratic freedoms. The art uses an array of mediums such as painting, ceramics, embroidery, and fiber to explore how the past shapes the present and future, and also touches on complex cultural experiences. The exhibition was created through a grant from The Pew Center for Arts & Heritage and organized by the Philadelphia Museum of Art, where it was on display through mid-February. It is the first major showing of Korean contemporary art in America since 2009 and has received critical acclaim.

"The artists share an experience of South Korea by birth, residence, or ancestry," says Paula Marincola, the Center's executive director. "Many of them are well known in South Korea or internationally, but this exhibition introduces some to American audiences for the first time."

The exhibition can be viewed in Minnesota at the Minneapolis Institute of Art until June 23.

—Demetra Aposporos

A Change to Federal Methadone Regulations

For the first time in more than 20 years, the Substance Abuse and Mental Health Services Administration has relaxed federal requirements for how methadone is dispensed at opioid treatment programs (OTPs), the only settings allowed to provide this lifesaving medication.

Methadone is a critical medication for treating opioid use disorder (OUD), but long-standing rules at the federal and state level had made it difficult for many people to access it. The new federal regulations dramatically improve access to care and flexibility for patients, and many of the changes are a permanent extension of flexible rules enacted during the COVID-19 pandemic designed to encourage social distancing and keep patients safe. Patients now can receive up to 28 days of take-home medication after a month in treatment—prior to the COVID-19 health emergency, they could have such access only after two years of inperson treatment.

In addition, counseling is no longer required as a prerequisite for treatment, more types of providers

in OTPs—such as physician assistants and nurse practitioners—are able to dispense methadone, and people can start treatment more quickly, without first demonstrating a one-year history of OUD. The Pew Charitable Trusts' substance use prevention and treatment initiative has long advocated for increased access to this critical medication. But in order to maximize the benefits these federal changes can have for patients, state policymakers now must also review state rules and align them with these new evidencebased standards.

"These new federal regulations align with decades of evidence on the safety and efficacy of methadone and have the potential to transform OTP care," said Frances McGaffey, who works on Pew's substance use prevention and treatment initiative. "But states also need to follow suit and install changes that will make methadone more easily accessible to patients."

—Daniel LeDuc

COST OF PUTTING A ROOF OVER YOUR HEAD

A record housing shortage and skyrocketing rents and home prices mean millions of Americans now struggle to afford housing.

By Daniel LeDuc Photographs by Lexey Swall for The Pew Charitable Trusts



arah Beatty has been selling real estate in Washington, D.C., and its suburbs for nearly two decades. She gets to know her clients—"the people in my car," as she refers to them—while shuttling them about looking for homes to buy. And over the years, those people have been changing. Yes, there are still clients who can afford the large and expensive house to hold a burgeoning family. And there are still clients who seek out good schools, proximity to their workplaces, and amenities like a nearby grocery store or restaurant—and can pay the price to get them.

But ask her about the first-time homebuyer, that person who has scraped and saved and is ready for a first mortgage on a house below \$400,000—costly compared with many parts of the country but entry level in the D.C. area—and she has to pause and think.

And then, she answers: In the past three years, she's had exactly two of them.

"That kind of traditional homebuyer, that person isn't out there anymore," she says.

Well, she knows there are people out there wishing for that first affordable home. She hears from them, sympathizes with them, and keeps looking for them. It's just that those first affordable homes are almost impossible to find. "Home availability is really low, and we're really competing against other people," Beatty says. Often those other people are investors who swoop in, able to pay cash—and then will rent out the house or condominium, elbowing out buyers dependent on financing who continue their search in the shrinking inventory of homes that can match their budgets.

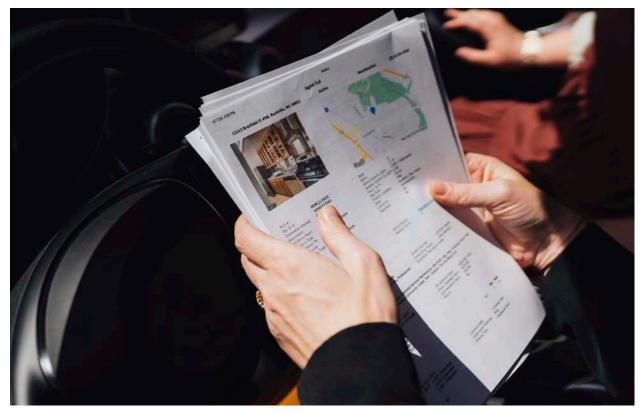
The problem is hardly confined to a big city like Washington. Across the country in the wide expanses of Montana, it was easy less than a decade ago to find a comfortable family home in Bozeman for \$250,000. Today, many of those same houses sell for more than \$600,000, with prices often driven up by people moving in from more expensive states who have sold a house and have ready cash to buy what they want. The pace of those new arrivals only accelerated during the COVID-19 pandemic.

State Senator Daniel Zolnikov (R) has watched the housing situation with growing dismay. Only seven of every 10 housing units needed to keep up with Montana's population growth were built in the last decade, he says, with the lack of supply driving up prices. He has seen families unable to afford houses living in campers and RVs—in a climate where winter temperatures routinely plunge to single digits.

"You're making 60,000 a year," he says, and to buy a house "you've got to pay 2,500 a month for a mortgage.



Real estate agent Sarah Beatty gets to know her clients—"the people in my car"—whom she drives around the Washington region as they look at homes for sale. In the past three years, only two of her clients have found homes below \$400,000.



Beatty says there is a dearth of affordable homes: "Home availability is really low, and we're really competing against other people."

If you want to still buy shoes, fix your car—which is more expensive—buy groceries—which is more expensive pay your energy bill—which is more expensive—that's not realistic."

The national numbers fill in the big picture of this story: From 2019 to 2022, the median price of a house jumped 25% in the U.S. And over the past seven years, rents have skyrocketed by 30%. These historic increases aren't only eating into family budgets; they're also taking away part of the American Dream from a growing number of people.

In December 2022, Pew Research Center found that 86% of U.S. adults said homeownership was important to their view of the American Dream, more even than having a successful career (79%). And nearly half of Americans said a lack of affordable housing was a major problem in their community.

"Americans are struggling to afford housing because housing costs are rising to the highest levels we've ever seen. That means housing, which was already the biggest line item in a family's budget, is taking up more and more of each paycheck," says The Pew Charitable Trusts' Alex Horowitz. "And that does a lot of damage, because it means people don't have enough to spend on other goods. People are living farther than they have before from the places they need to go, and homelessness is rising to the highest level we've ever seen." Horowitz and Tara Roche lead Pew's housing policy initiative, and Roche says outdated housing policies and financing structures have led to the current problem. "People continue to aspire to homeownership, but today's policies just haven't kept up with that demand, especially for people looking for starter or low-cost homes," she says. "It's really difficult to find safe, affordable financing to do that. So it shuts a lot of those people out of homeownership and kind of keeps them away from achieving the things they want to, which is a safe roof over their head in a community they love, near friends, family, jobs, a good school."

The Pew initiative researches the financing and availability of housing in the United States, illuminating how laws and regulations have been driving the shortage and the rising costs, to help policymakers find solutions.

Pew's analysis has found that strict land-use regulations have limited the availability of homes, especially lower-cost options such as apartments, town houses, and manufactured homes, and that financial policies have prevented millions of creditworthy homebuyers—including Black, Hispanic, and Indigenous people and those in rural areas—from obtaining mortgages to buy low-cost homes. Many borrowers have instead been pushed into riskier and more costly alternative financing arrangements such as land contracts and rent-to-own agreements that give buyers few protections. When Pew's research began, Roche says, she estimated that 12 million people might be using financing other than mortgages. Research determined that the actual number is triple that: 36 million. "That blew us away," she says. "One in five borrowers have used risky arrangements."

That's because mortgages for lower-priced homes have become expensive for lenders to make and for borrowers to find. And for many buyers, the problem starts even before they try to enter the market, when they are renting and trying to save for a down payment. Half the nation's renters are considered "burdened"—that is, they spend more than 30% of their income on housing.

"With rents reaching an all-time high, that makes it hard to save for a down payment, because such a large portion of a family's paycheck is going to cover housing costs," Horowitz says.

But some places are enacting real solutions, with the data again telling the tale.

Compare Dallas and Houston, for example. In 2015, the average rent in Dallas was \$1,120 a month, a little lower than in Houston. But from 2015 to 2023, the average rent in Dallas rose \$643, while in Houston it went up by only \$382—a difference of more than \$3,000 a year. And over that same period, homelessness dropped 29% in Houston but jumped 35% in Dallas. Why? Houston added 10.2% to its housing stock from 2015 to 2022 while Dallas added just 6.9%. If Dallas had matched Houston's pace, it would have 19,000 additional homes. One big reason Houston saw that change was that the city reduced its minimum lot size—so that people didn't have to buy more land than they wanted or could afford—and made smaller lots viable for town houses.

In Montana, Sen. Zolnikov responded to rising housing costs by sponsoring legislation to require that cities allow multiunit housing in commercial zones. Other legislation—all passed on a bipartisan basis—that is now state law allows duplex housing on any city home lot and the construction of accessory dwellings on lots that already allow single-family homes. The legislature also required communities of more than 5,000 residents to plan for the housing they'll need to accommodate population growth and to gather public comment earlier in the planning process, and changed zoning laws to treat less expensive manufactured housing the same as site-built housing.

And in Minneapolis, city officials have been working on zoning and other policy changes for more than a decade and in the process created a blueprint for communities seeking to fix their housing problems.

"We were seeing, particularly for families of color, a broadening gap between the number of places that they could afford to live," says the city's planning



New construction is dominating Minneapolis' downtown since the city made it easier to build apartments. In 2019, Minneapolis also became the first major city to eliminate exclusive single-family zoning in its efforts to increase the availability of housing. Mark Peterson/Redux



Houston increased its housing stock by more than 10% from 2015 to 2022, thanks to local policy changes that included reducing minimum lot sizes. Even as other big Texas cities like Dallas saw major increases in housing costs, the Houston moves kept prices in check, allowing families like the O'Neals—Nick and Alyn O'Neal and their son, Shepherd—to find an affordable home. Karen Warren/ Houston Chronicle via Getty Images

director, Meg McMahan. "And the city has taken a fairly aggressive position on trying to produce more housing in order to really meet that demand. It's been really focused on increasing supply at all income levels."

In 2019, Minneapolis became the first major U.S. city to eliminate exclusive single-family zoning, allowing duplex and triplex construction on all residential lots. In addition—and what may have been even more consequential in creating more housing—the city enacted a range of policy changes to make it easier to build apartment buildings in more places.

The city changed policies to simplify the process for constructing taller buildings and housing along corridors that have more transit options by reducing parking requirements for apartment complexes and encouraging development along commercial corridors.

From 2017 to 2022, Minneapolis' new housing stock increased 12%. Rents remained constant, and homelessness decreased by 12%.

"Minneapolis is coming out on top in terms of slower rent growth, high housing production, and generally the numbers are headed in the direction that we would expect and are happy to see," McMahan says. Pew's housing initiative continues to research and analyze states and cities that are embarking on needed policy changes, hoping to highlight successful strategies. It also is working with policymakers to promote the increase of small-mortgage credit and to improve protections on alternative financing.

"Everyone deserves a safe and affordable place to call home," Pew's Roche says. "And modernizing our policies can help people achieve their housing goals—for their families today and for many generations."

Daniel LeDuc is the editor of Trust.



For more on Pew's work to increase access to housing, listen to our podcast "After the Fact."



The Digital Biblio and a second secon

High-speed internet is a staple of everyday life, but many Americans don't have access to it because no network reaches them-or they can't afford to pay. By Carol Kaufmann

Photo Illustration by Cara Bahniuk/The Pew Charitable Trusts

Trust

eather Peatman is a hardworking photographer and farmer, but she spends a good portion of her days thinking about something entirely different from editing pictures or feeding her animals: how she can get a speedy internet connection.

In her hometown of Fletcher, Vermont—a rural community of about 1,300 people, less than an hour from the Canadian border—she lives on a 42-acre farm with sheep, goats, ducks, and chickens that would be complete except for its very slow WiFi connection. This is a daily problem because her work—she specializes in show horses and dogs—requires her to shoot thousands of photos, edit them quickly, and send them back to clients so they can select and buy images—and so she can get paid.

But uploading her photographs for a client could take "anywhere from two to five nights," she says something a photographer with fast internet service, known as broadband, could do in minutes. She can't even back up her photos on her phone at home because she doesn't have the bandwidth. "If I lose them, I lose them," she says.

Rather than wait for slow uploads, she drives 40 minutes to a hot spot in a bigger town and uploads her work there.

"It's a hassle, but it's a lot quicker than me trying to do it here," she says from the farm. "I can upload several gigabytes' worth of something on a public Wi-Fi network in a very short amount of time, compared to home."

The lack of fast internet connection plagues some 24 million Americans. Many, like Peatman, live in rural areas that remain unconnected, but others are in some of the country's biggest cities. Scores of urban neighborhoods also are unconnected, and often, numerous residents there can't afford internet service even when it is available. With internet service now nearly as essential as electricity in modern life, the digital divide is delineating a new group of haves and have-nots in America that has far-reaching implications.

Without broadband connection, citizens can't easily access news and information; opportunities to go to school and take classes online; online job applications or virtual interactions with government agencies, such as those that administer education loans; the chance to work from home or have online doctor appointments; or even simple daily activities, such as online video conversations with family and friends.

Rural broadband connections are often not available because it's too expensive for local governments or private internet service providers to build fiber optic cable installations and maintain them over vast areas with small populations. But having broadband available is only the first consideration—users also have to be able to pay for it. Federal infrastructure legislation passed in 2021 includes \$42 billion for state and local governments to address both issues. Funds are designated to expand service, in some cases through partnerships with regional utility districts where multiple towns join together to form a new entity to provide services, and there is direct money to help people who are struggling to pay bills.

In Vermont, this infrastructure model has historical precedence from the time when water and sewer service was first supplied to rural residents. Now, the state is trying to do the same thing with broadband, forming Communications Union Districts to oversee the work of physically digging into the ground or stringing cable from utility lines to place internet fiber in multiple counties and towns in rural areas.

"There's finally some money being spent in Vermont for broadband," says Matthew Hubbard, a Northeast broadband consultant who works on bringing rural broadband fiber to homes and supervises the construction. But connecting all customers is no easy task, especially when homes are spaced far apart, he says. And many, like Peatman, are still waiting.

Hubbard acknowledges the challenges. "Vermont is a rural state and some access is not easy," he says. "There's a lot of off-road pole lines that need to get reached with this fiber." (Satellite service is often an option for rural residents, though it also is too expensive for many and can come with serious data restrictions and penalties for exceeding data limits.)

Each state has its own challenges, says Kathryn de Wit, who leads The Pew Charitable Trusts' broadband access initiative. That was an early lesson, she says, when Pew's work began in 2018.

Another early lesson involved the limited availability of broadband. So, with growing bipartisan support among federal lawmakers to make large investments in highspeed internet access, Pew advocated for faster speed, increased technology standards, and stronger data collection requirements from internet providers so that investment money could be allocated more effectively.

"Our assessment of broadband availability used to be binary—is it technically available or not? Now, it needs to be more than that. What are the actual speeds customers receive? Is a connection reliable for homework? Is it reliable enough to justify spending your hard-earned paycheck?" de Wit says.

Pew's work also has included bringing together state and federal broadband officials, digital equity advocates, industry experts, and academic researchers so they could discuss how to better deliver broadband service. The initiative has analyzed national data on how affordable broadband service is throughout the nation, and how education levels, social vulnerability, and regional economic strength affect users' ability to



Heather Peatman goes where the Wi-Fi is, often a town 40 minutes from her home. As a professional photographer, she needs a stable internet connection with enough bandwidth to upload and transmit multiple photos at once—something she is unable to do from her farm in rural Vermont. Heather Peatman for The Pew Charitable Trusts



A crew installs fiber lines in Fletcher, Vermont, where Peatman lives. Towns throughout the state have formed municipal districts that partner with internet service providers to connect residents in rural areas to high-speed internet. The Pew Charitable Trusts



"I am bald, I am Black, I am blind, and I am beautiful!" says Marguerite Woods, who advocates to help older adults and people with low vision stay connected. "As a blind person, I use a lot of apps and need Wi-Fi to take care of myself. Everything you need to do is online nowadays. You got to have it." The Pew Charitable Trusts

pay. Since 2021, Pew has conducted an education and training program that provides no-cost assistance to 35 states and territories as they take advantage of the new federal infrastructure funding.

And Pew has encouraged continued federal funding for the Affordable Connectivity Program, which provides eligible households with a monthly subsidy to help pay for service.

"This really is an equity issue," de Wit says. She cites Pew Research Center data that found that 43% of adults making less than \$30,000 annually don't have broadband, and 49% of households making less than \$50,000 a year find it difficult to find money for internet service. "Affordable broadband democratizes opportunity, whether you're in an urban or rural community," she says.

William Honablew Jr., who serves as the digital equity coordinator for the city of Baltimore, sees this up close. His job is to meet with individuals and organizations to find out how to get all interested citizens online and help them reach what he calls their "digital potential" knowing and accessing Internet resources in a way that enriches their lives.

Broadband can help residents become better citizens, Honablew says, because it enables people to research topics that are important to them and to dig deeper on what they learn from media and other sources. Without a fast internet connection, "you don't have the tools to think through or analyze critically the information you're being provided," he says. "You end up falling down some of these rabbit holes where you are engaged in conspiracies and those types of things and missing really genuine opportunities to advance your life."

In addition to helping residents improve their digital literacy skills, he also focuses on older adults who often lack an understanding of how the internet works and how they can find information on social services.

For example, farmers market coupons are available at a senior center in Baltimore, he says, but those who need them have to be able to pick up the coupons, which is difficult if they don't have a ride or transportation. "If you're not able to do that, then you just stop," says Honablew. "Broadband technology can assist with this." Accessing a fast connection would yield options such as information about bus routes and schedules as well as ride sharing programs.

Another hurdle to digital equity, he says, is ensuring that users are comfortable with the broadband technology that, in many cases, state and local governments are providing. Honablew says that he's witnessed situations where people start using technology, get excited about it, and then go to a workshop where someone says something off-putting or makes them feel inferior, and "they just don't come back to learn more," he says.

Accessing broadband is especially important to those who need it to navigate daily life.

For native Baltimore resident and community advocate Marguerite Woods, a fast internet connection is a must. Woods is blind and uses the internet for connection—to all things. Zoom, for one, helps her stay in touch with friends and family. She also uses the app Be My Eyes, which calls a sighted person who helps guide her through tasks such as choosing clothes, finding a path through a busy restaurant, locating a particular street, or reading mail. These apps, and others she uses, require high speed Wi-Fi.

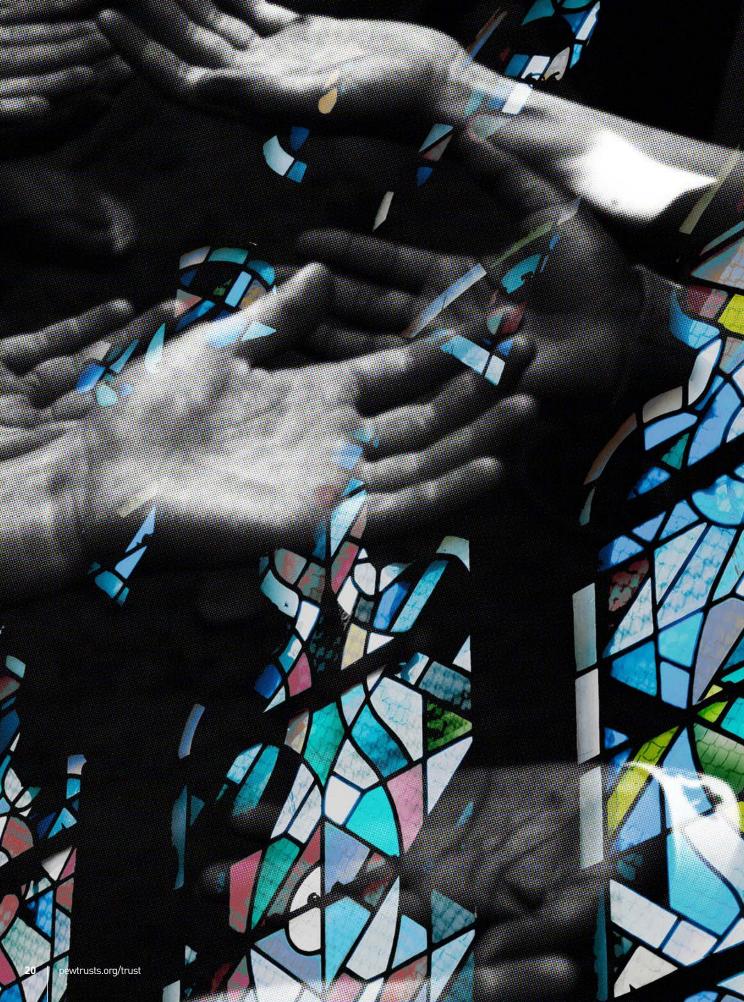
"We want to be independent," Woods says of the blind community. "We just need to have accessible ways to connect with the larger community, ways to take care of our medical needs, our physical needs, social and spiritual, and to be able to travel and share our ideas. You've got to have connections to move forward and take care of yourself," Woods says.

These are the kinds of gaps in the internet landscape that Honablew is trying to identify—and mend. "Broadband is important because it is now the new set of streets where information travels," says Honablew. "Without having access, you don't know what's happening in the world."

Carol Kaufmann is a Trust staff writer.



William Honablew Jr., the digital equity coordinator for Baltimore, is tasked not only with connecting the citizens of his city to highspeed internet but also with empowering them to use it—steps necessary, he says, "to close the digital divide and keep it closed." The Pew Charitable Trusts



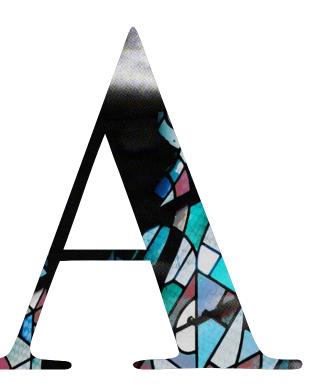


A Pew Research Center survey finds that 7 in 10 U.S. adults call themselves spiritual including 22% who say they aren't religious. So...

What Does Being SPIRITUAL Mean?



ILLUSTRATIONS BY BRIANA OKEBALAMA/THE PEW CHARITABLE TRUSTS



Austin Vivolo doesn't recall what grade he was in when his parents stopped going to church, only that he and his older brother were delighted. "We thought, 'Oh, we don't have to go to that boring place anymore where we always have to be quiet.""

Today the Boca Raton, Florida, massage therapist "definitely believes in God" but concedes his concept is "different from the typical."

"My God is essentially the totality of all reality, of everything conceivable and nonconceivable," says Vivolo, who is 28. And it's not in the communal setting of a church but in the centering stillness of yoga practice—on a beach sometimes, at sunrise—that he seeks to "connect with the ultimate truth of my being."

Like 28% of U.S. adults and 43% of those under age 30, Vivolo claims no affiliation with organized religion, counting himself among the growing millions of Americans who identify as religiously "none" or "nothing in particular."

Yet despite this trend, a Pew Research Center survey finds that belief in a spiritual realm beyond this world is widespread among Americans, even for those who are not religious. "Overall, 70% of U.S. adults can be considered 'spiritual' in some way, because they think of themselves as spiritual people or say spirituality is very important in their lives," says the report, "Spirituality Among Americans," which was published in December.

Conducted July 31 through Aug. 6, the nationally

representative online survey found that 48% of U.S. adults identify as religious and spiritual, 22% as spiritual but not religious, 10% as religious but not spiritual, and 21% as neither. Despite such different identities, the report found that 83% of all adults believe humans have a soul or a spirit in addition to their own physical body, and 81% say there is something spiritual beyond the natural world, even if they can't see it.

The findings come amid a backdrop that shows that the Christian share of the U.S. population has been declining in recent decades, notes Gregory A. Smith, Pew Research Center's associate director of research. Although 16% of adults over age 65 report no affiliation with organized religion, that's how 43% of 18- to 29-year-olds like Vivolo view themselves. Another recent Pew analysis of religious trends projects that by 2070, Christians might represent just a half to a third of the U.S. population—down from 9 in 10 as recently as the early 1990s.

"So that raised the question for us," says Smith, co-leader of the survey. "What does it mean? Are we headed towards secularization," a worldview largely devoid of God and transcendence? "Or could it be that the U.S. is becoming more spiritual even as it becomes less religious? So this survey was designed to measure the spirituality of the American public."

But first the researchers had to grapple with what exactly is "spirituality?" The word comes to English

Thousands of respondents also took the time to jot a few words or sentences about what the term "spiritual" means to them. The result is a broad range of findings both quantitative and qualitative, statistical and personal. "To me, spiritual means to be in touch with nature, see the beauty in everything, feel the love of Mother Nature, to know that there is something out there that is greater than me..."

- SURVEY RESPONDENT

from *spiritus*, Latin for "breath," with connotations of life force. Some people understand it to be a practice like prayer or meditation, others as belief, still others as experiences of awe, peace, or transcendence. "So we flipped that ambiguity," Smith explains, "and used it to our advantage."

Rather than ask the 11,201 survey respondents who are part of the Center's nationally representative American Trends Panel—if they agree with some prepared definition of the term, the survey elicited their understanding of spirituality. Many of its questions invited respondents to identify the practices, beliefs, and experiences they consider spiritual, and to supply their own understanding of spirituality.

"I think that's one of the key contributions of the study," says Smith. Thousands of respondents also took the time to jot a few words or sentences about what the term "spiritual" means to them. The result is a broad range of findings both quantitative and qualitative, statistical and personal.

"To me, spiritual means to be in touch with nature, see the beauty in everything, feel the love of Mother Nature, to know that there is something out there that is greater than me ..." wrote one respondent.

"The belief that a supreme being is the creator and ultimate controller of the universe and that humans' existence in this realm is transient," wrote another. "I associate spiritual with religious, something that takes me out of my everyday life," said a third. Vivolo, who did not participate in the survey, defines spirituality as "the science of the unseen."

Other respondents described spirituality as

"something larger and more creative than science," or "a relationship with God," or "connecting with the creator," or "living in accordance with the Bible," or "being one with your soul, emotions, feelings, actions."

The study also took a close look at how Americans who describe their religiosity as none or nothing in particular view the notion of spirituality. In a separate report based on the survey, "Religious 'Nones' in America: Who They Are and What They Believe," released in January, the Center's researchers found that 17% of "nones" identify as atheist, 20% say they are agnostic, and 63% choose "nothing in particular."

Most nones believe in God or another power, even though they rarely attend religious services, and about half think of themselves as spiritual. Most say religion does some harm, but many also think it does some good, and they are not uniformly anti-religious. Most nones also "reject the idea that science can explain everything." As a group, the nones tend to vote less often and are less civically engaged than the religiously affiliated, but the data shows that atheists and agnostics participate in civic life "at rates matching or exceeding religiously affiliated people."

Roughly half of Americans say they believe that animals, graveyards, and elements of nature such as rivers, trees, and mountains have spirits or spiritual energies. But a closer analysis of the data reveals some important differences. Although half of evangelicals and two-thirds of atheists agree that nonhuman animals don't have spirits, many evangelicals believe that only humans have spirits. Most atheists believe that neither humans nor animals have spirits. nd while 54% of adults say they believe in "God as described in the Bible," the data shows marked differences here as well. Fully 84% of people who identify as religious and spiritual believe in the biblical God, while just 20% of

the spiritual-but-not-religious share that belief.

"The survey really shows us what's going on under the hood when people talk about spirituality," says Evan Stewart, a sociologist at the University of Massachusetts, Boston, and an associate editor at the journal *Sociology of Religion*. "This kind of polling is really useful in establishing basic facts and baselines about the topics we study."

Pew Research Center began surveying Americans' religious beliefs and attitudes decades ago. And although it has previously dipped its toe into the murkier waters of spirituality, this is its deepest dive yet into the subject. Smith says the "Spirituality Among Americans" survey "asked a lot of questions we never asked before."

For the first time, the Center explored how many adults believe that people who have died can communicate with the living (42% say yes), assist the living (46%), harm the living (18%), or be united with other loved ones who have already died (57%).

About 45% of all survey respondents reported feeling a deep sense of wonder about the universe, or a deep sense of spiritual peace and well-being, or a sudden feeling of connection with something from "beyond this world." Three in 10 reported encountering a spirit or "unseen spiritual forces," 7 in 10 believe in heaven, and 6 in 10

believe in hell—the same number who believe in both.

"What surprised me" about the survey "was the significant portion of spiritual practices that pertain to the supernatural," says John C. Green, emeritus professor of political science at the University of Akron and coauthor of the 2020 book *Secular Surge: A New Fault Line in American Politics.* "Despite the argument that we live in a secular age ... this shows that a lot of people care about things that go beyond the material world."

Green, who has long advised the Center on the development of its religious surveys, says he hopes to see its future surveys of spirituality ask more questions about secular values and probe the spiritual practices of those who identify as nones. "When nones pray," he says, "what are they doing?"

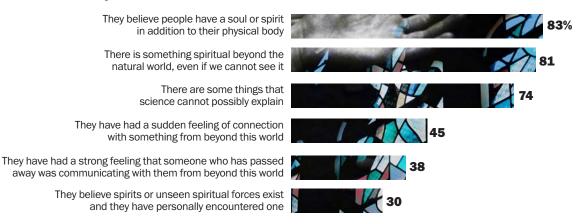
As a social scientist, Green also finds it intriguing that "secularism has yet not formed the kinds of strong communities that religion does." Although religious traditionalists lean Republican, the nones—who broadly lean Democrat—tend to vote and volunteer less. And that has Green wondering how the mounting tide of young American nones might coalesce into politically and culturally impactful social groups in the years ahead.

"It's going to be fascinating to see," he says, "how the next generation works these things out."

David O'Reilly was the longtime religion reporter for The Philadelphia Inquirer.

Most Americans believe people have a soul or spirit

% of U.S. adults who say ...



Source: Survey of U.S. adults conducted July 31–Aug. 6, 2023. "Spirituality Among Americans"

PEW RESEARCH CENTER

Tribal Nations Announce First Ocean and Coastal Protections in U.S.

The Yurok-Tolowa-Dee-ni' Indigenous Marine Stewardship Area sits off the California coast.

BY JOHN BRILEY



The newly designated Yurok-Tolowa-Dee-ni' Indigenous Marine Stewardship Area, which runs from the California-Oregon border to south of Trinidad, California, is home to rich wildlife and plant biodiversity—and stunning coastal vistas. L. Toshio Kishiyama/Getty Images

Three Tribal Nations on the West Coast achieved a major milestone in conservation in September when they designated the Yurok-Tolowa-Dee-ni' Indigenous Marine Stewardship Area (IMSA), the first such protection enacted by Tribal governments in the United States.

The Yurok-Tolowa-Dee-ni' IMSA—which spans coastal forests and dunes from the California-Oregon border to just south of Trinidad, California, and extends three miles offshore into the Pacific Ocean is home to species of high cultural value to the Tribal Nations, including mussels, kelp, abalone, salmon, shorebirds, and eels. The nations—the Resighini Tribe of Yurok People, Tolowa Dee-ni' Nation, and Cher-Ae Heights Indian Community of the Trinidad Rancheria—aim to safeguard the area from environmental threats, including sea level rise and coastal erosion, by enhancing Tribal stewardship and applying their Indigenous knowledge. Working together, they seek to improve water quality, reverse ocean acidification and species and habitat loss, manage offshore development, and mitigate other climate impacts affecting their communities.

The Pew Charitable Trusts has provided funding and technical assistance to the nations' efforts

on the IMSA since late 2022. At the time, several area Tribal governments had just launched the Tribal Marine Stewards Network, an organization built from years of groundwork and collaboration. The network coordinates marine monitoring projects and Tribal community engagement activities, including ethnographic interviews, youth camps, beach surveys, and workshops.

One example is the Tribal Intertidal Digital Ecological Surveys (TIDES) project. In concert with the Scripps Institution of Oceanography at the University of California, San Diego, several Tribes are using a relatively low-cost and easily replicable method of engaging communities directly in research on and management of their coastal areas.

By suspending high-resolution cameras above rocky intertidal habitat, teams capture thousands of images, which are then stitched together using software to create 3D habitat maps. These large-area imaging surveys are repeated biannually to create a long-term monitoring database that captures seasonal variation in biological conditions, aiding Tribes in documenting often-dramatic changes in their ancestral waters.

In identical proclamations of the Indigenous Marine Stewardship Area on Sept. 22, each of the Tribes stated, "[W]e ... can no longer wait to act to preserve and protect this culturally and ecologically important place." In their resolutions, the Tribes invite "other federally recognized Tribal governments with ancestral connections to this area, as well as the government of the United States and the government of the state of California, to work with us in achieving our vision for reclaiming Tribal stewardship."

The announcement of the IMSA aligns with efforts within each Tribe to bolster natural and cultural resource management capacity. These efforts have included learning from similar Indigenous-led programs around the globe, including the Indigenous Ranger and Protected Area program in Australia and the Coastal Guardian Watchmen program of Coastal First Nations along Canada's Pacific coast.

In recent years, the Tolowa-Dee-ni' Nation started a program called Netlh-'ii~-ne, roughly translated as "the ones who care for or look after." This program seeks to build capacity among Tribal members as active managers of natural resources within their ancestral territory and specifically to enforce harvest policies enacted by the Tribe, with a focus on six keystone species: lhvmsr (surf smelt), ch'uy-xee-ni (night smelt), met-'e (razor clam), dee-lhat (mussels), lat (seaweed), and chii-la'-lhsrik (surfperch).

For millennia, these and other Indigenous communities in the U.S. have stewarded their lands and waters—for food, medicine, ceremony, and other customary uses—and many continue to do so today. The California government has not yet formally responded to the IMSA announcement, but there are indications that state leaders will back the Tribes. In a 2019 executive order, Governor Gavin Newsom (D) apologized to the state's Native American peoples for a legacy of "violence, exploitation, dispossession, and the attempted destruction of tribal communities" and noted that California now recognizes many of those communities as sovereign governments.

And in April 2022, the California Natural Resources Agency released its "Pathways to 30x30 California" report, which commits the state to strengthening partnerships with Tribes and specifically prioritizes IMSAs as a collaborative approach for furthering California's objective to protect at least 30% of its lands and waters by 2030.

In February, the California Department of Parks and Recreation and the Resighini Tribe of Yurok People signed a memorandum of understanding to collaborate on public land and water management, including a commitment to incorporate Indigenous traditional knowledge to better protect and preserve state parks and cultural resources. Later this year, the California Legislature will consider Assembly Bill 1284 to better define and implement co-management of natural resources between Tribal Nations and the state. The Pew-supported legislation was written by Assembly Member James Ramos (D) and sponsored by the Resighini Tribe of Yurok People and the Tolowa Dee-ni' Nation.

"We all share a common culture and way of life that needs protecting."

"Our Tribes have a responsibility to steward, protect, and restore the ocean and coastal resources within our ancestral territories," says Jeri Lynn Thompson, chairperson of the Tolowa Dee-ni' Nation. "We seek to establish long-term, consistent engagement with state and federal agencies while implementing Indigenous traditional knowledge and Tribal science into management practices within the IMSA."

Coordinators of the Tribal Marine Stewards Network are seeking to create an endowment to sustain its work into the future. "We all share a common culture and way of life that needs protecting," says Fawn C. Murphy, chairperson of the Resignini Tribe of Yurok People, "and we share the same desire to leave something for future generations to be proud of."

John Briley is a Trust staff writer.

Most Americans say elected officials should avoid heated or aggressive speech

BY TED VAN GREEN

Seven in 10 Americans say elected officials should avoid heated or aggressive language because it could encourage some people to take violent action. By contrast, 29% say officials should be able to use heated language without worrying about how some people may act.

There are sizable partisan differences in these opinions, with Democrats more likely than Republicans to say elected officials should avoid heated language.

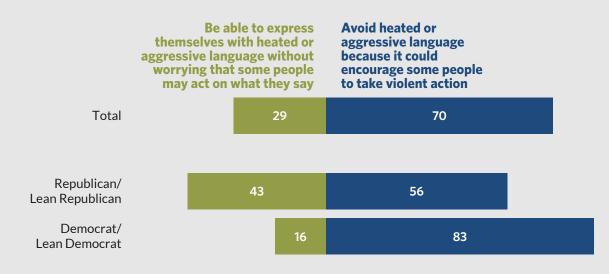
A narrow majority of Republicans and Republicanleaning independents (56%) say elected officials should avoid heated or aggressive language, while 43% say officials should be able to express themselves with this kind of language without worrying about whether people may act on what they say. Republicans today are more likely than they were in 2019 to see the use of heated or aggressive language by elected officials as acceptable: In 2019, 37% said officials should be able to use this kind of language.

By contrast, the vast majority of Democrats and Democratic-leaning independents (83%) say elected officials should avoid using heated language, while 16% say officials should be able to use this kind of language without worrying about how some people might act. There has been no change in views among Democrats since 2019.

In addition to the wide partisan gap on this question, there are some notable demographic differences, according to a new survey by Pew Research Center, conducted Jan. 16-21 among 5,140 adults:

Majorities in both parties—though more Democrats than Republicans—say elected officials should avoid heated or aggressive language

% who say elected officials should ...



Note: No answer responses are not shown

Gender

Women are 7 percentage points more likely than men to say elected officials should avoid heated language (73% vs. 66%). This overall gender gap is driven primarily by differences among Republicans.

- 61% of Republican women say elected officials should avoid heated language, compared with 51% of GOP men.
- Democratic women and men do not differ substantially on this question.

Age

At least two-thirds of U.S. adults in all age groups say elected officials should avoid heated language. But there are some modest age differences within partisan groups, particularly among Democrats.

- Democrats ages 50 and older are more likely than those under 50 to say elected officials should avoid heated language (89% vs. 79%).
- 54% of Republicans under 50 and 58% of those ages 50 and older say elected officials should avoid using heated language.

Education

Adults who have at least a bachelor's degree are more likely than those with less formal education to say elected officials should avoid the use of heated or aggressive language because it could encourage violence (77% vs. 66%). This pattern holds more among Democrats than Republicans.

- 91% of Democrats with at least a college degree say elected officials should avoid heated language, compared with 78% of Democrats who do not have a bachelor's degree.
- Among Republicans, there is little difference on this question by education.

Do views differ when asked about 'political candidates' rather than 'elected officials'?

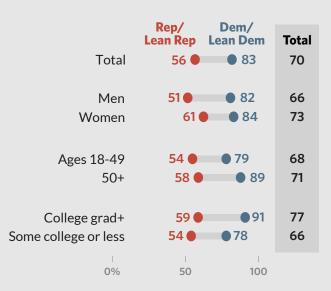
Americans hold nearly identical views about the acceptability of "political candidates" using heated or aggressive language and the acceptability of "elected officials" doing so.

The same is true among partisans: Slim majorities of Republicans say political candidates (54%) and elected officials (56%) should not use heated language. And nearly identical shares of Democrats say political candidates (85%) and elected officials (83%) should avoid heated language.

Ted Van Green is a research analyst focusing on U.S. politics and policy at Pew Research Center.

Within each party, there are relatively modest differences in whether elected officials should avoid heated language

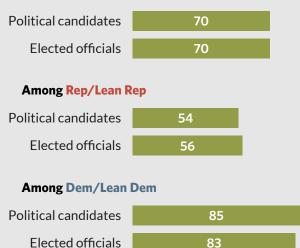
% who say elected officials should avoid heated or aggressive language because it could encourage some people to take violent action



No difference in views of how 'political candidates' verses 'elected officials' should approach heated language

% who say ___ should avoid heated or aggressive language because it could encourage some people to take violent action

Among all U.S. adults



Sources: Pew Research Center

A Journey to Earth's Last Great Wilderness

Traveling across the high seas to Antarctica, a Pew expert sees for herself how climate change is altering our world.

BY NICHOLA CLARK



King cormorants perch on a rock outcropping on New Island, in the Falkland Islands, one of the first stops on the author's journey to Antarctica. The Pew Charitable Trusts

In the early hours of Nov. 20 last year, I was awakened aboard the 297-foot expedition vessel Island Sky by an announcement I had been looking forward to hearing for years: "If you look outside, you will see Antarctica." Our journey from Argentina had taken us nine days and the last day and night of sailing through 24-foot swells had given way to calm, glasslike waters, sunny blue skies, and a dramatic backdrop of snowy mountains and icebergs.

I went to Antarctica with 97 other women and nonbinary people bound on a voyage that was the capstone of a year-long leadership training program called Homeward Bound, which I signed up for to improve my effectiveness as an ocean policy expert at Pew. We came from 18 countries with a wide range of expertise in the fields of STEMM (science, technology, engineering, mathematics, and medicine). Our main objective was to build leadership skills tailored toward making a positive difference for our planet. Homeward Bound chose Antarctica because it's one of the places most affected by climate change, and the shifts there are already rippling across the planet—for example, melting ice sheets driving sealevel rise and the warming Southern Ocean altering currents worldwide.

We had departed Nov. 11, from Puerto Madryn, Argentina, stopping first in the Falkland Islands, also known as the Malvinas Islands, where I found myself overwhelmed by the size of the penguin and albatross colonies there with hundreds, and sometimes even thousands, of mating pairs. I especially enjoyed watching a gentoo penguin trudging to collect grass for its partner's nest—and dodging others hoping to pilfer that grass—and king penguins enduring



An iceberg looms in the Antarctic Sound. Climate change is causing rapid shifts in the annual formation and melting of sea ice in the Southern Ocean, which is affecting numerous species of penguins and other wildlife in the region. The Pew Charitable Trusts

harassment from their hungry teenage chicks.

On Nov. 18, as we lurched across open ocean between the Falklands and the Antarctic Peninsula, I realized I was, for the first time, in the high seas—which Pew and our partners in the High Seas Alliance have been working for years to protect. Conserving the high seas, which make up two-thirds of the ocean, is no small feat: They lie 200 nautical miles from any shore and tend to be as far from people's minds as they are from land.

But protecting these areas is critical. Worldwide, the high seas contain immense biodiversity—from whales, sharks, and dolphins, to rare, unique ecosystems that form around seamounts, hydrothermal vents, and more. Currently, there are few safeguards to protect these waters but that could change soon: A new treaty, adopted by the United Nations in June 2023, presents an opportunity to protect the high seas. The treaty will enter into force only after 60 countries formally agree to be legally bound by it. Once it is operational, it can be used to establish marine protected areas and to require environmental impact assessments for new activities that could cause significant harm.

The next day, as we powered through gale-forced winds, our captain announced that we were 60 miles from Antarctica—progress confirmed by the increasing numbers of cape petrel gliding above the waves.

By the morning of the 20th, we were anchored in calm waters a few hundred yards from shore. We boarded our Zodiacs to shuttle to the beach and took our first ceremonious steps on the frozen continent.

It might seem odd to say about a place renowned for its snow and ice, but the most striking feature of

Antarctica is the colors—the pastels cast by sunlight on snow, the silky gray hues of seams of rock, the almost musical blues of the icebergs. And, of course, the sea. Acres of Southern Ocean waters that shapeshift with the hours, the weather, and our moods, one moment a choppy canvas of gleaming steel, the next a shadowy menace, and—every now and then—a glassy mirror reflecting a melting sunset.

For brief moments of wonder I could forget that this most remote place is under threat from human activity. Fortunately, Pew has worked for years to counter those threats, helping to secure the Ross Sea Marine Protected Area—at 600,000 square miles the largest protected area on Earth—and is continuing to advocate for additional Southern Ocean reserves.

On this expedition we were trying to minimize our impact on each of our stops by following strict protocols: ensuring we didn't introduce alien species to the ecosystem, thoroughly washing our gear when we returned to the ship (to avoid transferring organisms from one place to another), and generally practicing the "leave no trace" ethos of travel. We were also sharing awe—hearing the breath of humpback whales breaching off the Island Sky's bow, penguins pacing our Zodiacs and periodically launching themselves, porpoise-like, into the air, a stillness and silence that few of us have ever witnessed.

At our first stop, Aitcho Island in the South Shetlands, we were greeted by colonies of gentoo and chinstrap penguins, waddling busily around the ice and snow. Amid this activity a leopard seal lurked a few feet from shore, hoping to snare an oblivious penguin.



Penguins throughout Antarctica face an even graver threat right now: avian flu, which scientists had detected spreading among the nearby South Georgia's colonies shortly before our arrival. At this writing, experts say it has

now spread to Antarctica, although it's unclear how extensively or how long the epidemic might last.

Among our more fascinating stops was Deception Island, an active volcano off the tip of the Antarctic Peninsula. During an eruption thousands of years ago, the volcano's crater collapsed, allowing ocean waters to fill the caldera through a breach. The resulting protected bay became a major whaling station in the early 1900s and the rusty remnants of this dark history remain.

We entered the cove and were greeted by three Weddell seals, from which we kept a respectable distance. True to our leader's briefing, we found the sand summertime warm due to radiating heat from the magma below. She had also advised us that the water would be cold and, as a true scientist, had invited us to verify that with a legitimate polar plunge.

So after a two-hour hike to the top of the crater and back, I and dozens of others stripped to our bathing suits—we'd been told in advance of this opportunity and waded into the Southern Ocean. At 0.6 degrees Celsius (just over 33 degrees Fahrenheit) it was indeed (very!) cold, but we'd come this far: I took a deep breath and submerged for a full head dunk before hurrying back to shore.

Back onboard the Island Sky, we settled into the latest of the expedition's lectures, which over the course of the trip included talks by a science adviser to the BBC Frozen Planet series, an expert on the Antarctic explorer Ernest Shackleton, and me, speaking on the U.N. high seas treaty.

Throughout this journey, I was humbled to be among such brilliant, thoughtful people—the geologists, biologists, and ecologists I'd expected but also mathematicians, medical doctors, quantum computing physicists, and others, including an astrobiologist who launched the Slovakian space program.

It was these human interactions as much as my awe at the natural surroundings that redoubled my commitment to marine conservation—in the Southern Ocean and around the world. How humankind stewards our natural environment will determine so much about our future. As we began our voyage home, the shores of Antarctica faded in the wake of the Island Sky and I felt confident that our global community can get this right, if we're willing to trust the science and work together.

Nichola Clark works on The Pew Charitable Trusts' ocean governance project.



Elephant seal pups loll on a beach in Walker Bay on Livingston Island, just north of the Antarctic Peninsula. The author was humbled by the purity of nature and breadth of wildlife she saw in the region, and even more so by the accomplishments and kindness of the other scientists on her expedition. The Pew Charitable Trusts

Honduras' Coastal Wetlands: Important for Biodiversity, Climate, and the Country's People

Jimmy Andino and Alejandra Ramírez believe that improving policies and management practices can help preserve these valuable ecosystems.

Biologist Jimmy Andino has dedicated much of his professional life to protecting the marine resources of Honduras, with more than a decade at the Center for Marine Studies (CEM, for its Spanish abbreviation). As executive director of the CEM, Andino—together with Alejandra Ramírez, the organization's climate governance coordinator—has led recent efforts to ensure that ongoing coastal wetland research and conservation lead to better management of these ecosystems, a more ambitious Nationally Determined Contribution (the commitments governments make to reduce global emissions and the effects of climate change), and input from local communities. This interview has been edited for clarity and length.

What role has the Center for Marine Studies played in protecting Honduras' marine ecosystems?

Andino: For 14 years, the Center for Marine Studies (CEM) has promoted a responsible and sustainable fishery, which has ensured that more than 4,500 families in Honduran coastal communities can make a living from fishing—with an income that exceeds the national minimum wage—allowing them to cover the education and health expenses of their children. This was achieved by managing marine ecosystems in Honduras and by protecting 500 square kilometers (nearly 200 square miles) of marine habitat, which helps shield the region's biodiversity from the effects of climate change and helps conserve marine species as the primary food source for thousands of people in the region. In this way, the CEM is helping the national government, local authorities, civil society, and fishers make better decisions about resource management.

How has Honduras fared historically in terms of conserving coastal wetlands?

Andino: Honduras has about 4,600 square miles of wetlands—about three times the size of the state of Rhode Island—of which mangroves cover about 200 square miles distributed in four coastal regions: the Bay Islands, Atlantic, La Mosquitia, and Pacific. Taken together, four species of mangroves—*Rhizophora*



Photos courtesy of Jimmy Andino and Alejandra Ramírez

mangle (red mangrove), *Laguncularia racemosa* (white mangrove), *Avicennia germinans* (black mangrove), and *Conocarpus erectus* (button mangrove)—account for 1% of the country's total forest cover.

Mangroves are globally important coastal ecosystems that develop in the coastal zone of tropical and subtropical countries, in areas where seawater mixes with water from rivers, lagoons, and underground springs. They generate multiple environmental goods and services used by human populations. For example, because of their ability to sequester and store large amounts of carbon in their sediments and vegetation, mangrove ecosystems are key nature-based solutions to the challenges posed by climate change. According to the National Institute of Forest Conservation and Development of Honduras, from 2017 to 2022 Honduran mangroves on average stored 346.7 tons of carbon per hectare (nearly 2.5 acres).

In terms of governance, Honduras has constructed policies and set up international goals to ensure the protection of coastal wetlands. A National Policy on Wetlands and Coastal Marine Spaces of Honduras (2019-2029) is available as a regulatory framework for the conservation of marine/coastal habitats, and international commitments are in the framework of Nationally Determined Contributions.

Mangroves offer other important benefits for Honduras, beyond carbon sequestration. Isn't that right?

Andino: Yes. These ecosystems are vital for the coastal communities that inhabit them and for those communities that develop in the highlands, and they directly and indirectly benefit terrestrial and aquatic flora and fauna.

Honduras has mangroves on both coasts and hundreds of coastal communities and cities that depend directly on ecosystem services, such as:

- Protection against storms and other weather events.
- Water regulation (aquifer recharge and water filtration).
- Mitigation of sea-level rise.
- Shoreline stabilization and coastal erosion control.
- Retention, assimilation, and transformation of nutrients.
- Retention of sediment, carbon, and pollutants.
- Habitat for a great diversity of species of fish, crustaceans, mollusks, mammals, reptiles, amphibians, and birds, some of them commercially important or endangered.
- Maintenance of fisheries in which about 75% of commercial fishing species spend part of their life cycle in mangroves, or depend on mangroves for food.

Ramírez: Mangroves provide several environmental benefits, such as protection from hurricanes and storms, and the purification and regulation of water flow. They serve as a refuge for migratory species. They're also a means of obtaining food and income: For example, in southern Honduras, a local mollusk that provides a source of income for entire families—who gather and sell the mollusks—grows and is produced in the mangroves. Mangroves are also a source of income in the tourism sector, where groups of boatmen take tourists to contemplate the wonderful landscapes of the mangroves.

Yet there's a lot that we still don't know about mangroves.

Andino: That's right. Research on mangrove ecosystems is scarce in most countries, and Honduras is no exception. In Honduras, there is little documented information at the national level on the current state of mangroves, because studies have been isolated or focused on specific areas or regions. Several of these studies have been developed by short-term projects and educational institutions.

So because we only have data at a local scale—or sometimes national statistics extrapolated from regional sources in Central America—it's a priority to generate information at the national level on blue carbon in mangrove ecosystems in Honduras.

The goal is to have tools that allow the dissemination of current knowledge of mangrove ecosystems



Fishing boats line the shoreline of the Rio Viejo in southern Honduras. Coastal wetlands help provide adaptive benefits, including maintaining the livelihoods of local fishers. Centro de Estudios Marinos

in the country and report on the distribution, forest characteristics, and carbon stored in these ecosystems. Likewise, we want to have a technical instrument to support informed decision-making about the conservation and sustainability of mangrove ecosystems in Honduras.

What challenges does Honduras face in protecting and restoring these ecosystems?

Andino: Degradation of mangrove forests, and changes in land use in these forests, run the risk of emitting carbon into the atmosphere. That's why we need to identify the various carbon stores in mangroves at local, regional, and national levels, so we can develop specific conservation, management, and restoration strategies.

Another challenge is the lack of—or little enforcement of—wetland management policies and mangrove protection laws on the part of national authorities. There are national agreements and local regulations in the country, and Honduras is a signatory to international conventions on the protection of wetlands and mangroves. But degradation, deforestation, mangrove cutting for urbanization and coastal infrastructure, dredging, and urban pollution still persist as a result of a lack of planning in coastal marine areas that hinders effective management of the mangrove ecosystem.

How did you end up working at CEM and in the conservation of marine ecosystems?

Andino: As a Honduran biologist focused on biodiversity conservation, protecting marine resources was a life decision for me. In my 13 years in coastal marine resource management in Honduras, I recognize the importance of ecosystems as critical habitats for the survival of species, but I also recognize that coastal marine ecosystems (such as the mangrove) are very important ecosystems for the benefits they provide to coastal communities and cities, and to the thousands of fishing families whose livelihoods are linked to the mangrove system.

Ramírez: After years of working on climate change projects, I was invited to be part of the CEM team to help meet the marine-coastal ecosystem conservation goals by focusing on the country's climate governance. I've had the joy of working on both climate change mitigation and adaptation before, and I hope to make my mark on protecting the country's natural resources.

How will your new partnership with The Pew Charitable Trusts support Honduras in the conservation of these ecosystems?

Andino: This Pew project in Honduras aims to strengthen public policies to improve mangrove management in Honduras by identifying gaps in data collection information on mangroves. Likewise, the

project is designed to help record the contributions of mangroves in blue carbon measurements as part of Honduras' goals for its 2025 Nationally Determined Contributions.

The project also seeks to connect and facilitate strategic communication between the various government entities working on mangrove and climate management and achieve greater fluidity in the exchange of communication—and use and interpretation of mangrove and blue carbon data—to contribute to national reports and international commitments.

This project also seeks to empower and strengthen several multisectoral entities, such as the Interinstitutional Committee for the Environmental and Protected Areas of the Tela region, to achieve better mangrove governance in Honduras.

What do you think this new line of work can bring to coastal communities?

Andino: With its focus on local involvement, this project can ensure that coastal communities continue to strengthen their active participation in mangrove protection and management activities, recognizing their role as those responsible to the world for conserving mangroves—the vulnerable ecosystems on which we all depend. These communities will be participating in negotiation, discussion, and decision-making with other national actors and authorities, and their opinions will be heard and taken into account in the management of mangrove ecosystems.

Is there anything else you'd like to add about Honduras' aspirations in coastal ecosystem conservation and national climate policies?

Ramírez: The protection of wetlands and other coastal ecosystems has been added to the list of priorities in government policies, with different Honduran institutions working together to define the most conducive routes to implement true conservation actions.

Andino: Honduras is a country blessed with a high biodiversity of tropical marine coastal ecosystems. So we must act and be responsible for good management, guaranteeing interdisciplinary collaboration in the creation of effective and strategic high-impact public policies that preserve the ecological integrity of these coastal ecosystems. The protection of these ecosystems is vital, so that they continue to provide environmental services on a global and national scale for the enjoyment of present and future generations.

The future is now. We must act and do our part; together we can make a difference.

The Pew Charitable Trusts applies a rigorous, analytical approach to **improve public policy**, **inform the public**, and **invigorate civic life**, as these recent accomplishments illustrate.

IMPROVING PUBLIC POLICY



Rock formations and canyons define southeastern Oregon's Owyhee Canyonlands. Gordon Kico

417,000 acres protected in Owyhee Canyonlands in Oregon

In February, the Bureau of Land Management released a final Record of Decision covering 4.6 million acres of public lands in southeastern Oregon that identified 417,000 acres as lands with wilderness characteristics. Pew's U.S. conservation program worked for many years in support of a management plan that reflects safeguards proposed by the local citizen advisory committee. The protected landscape includes multicolored winding canyons, spectacular high desert rock formations, and rolling sagebrush uplands that are home to the greater sage-grouse and more than 350 other species, including the pygmy rabbit, pronghorn antelope, and golden eagle. The protections also help to sustain hiking, camping, hunting, angling, and wildlife-watching, which are popular pastimes in southeastern Oregon that contribute to the state's thriving \$15.6 billion outdoor recreation economy.

Major conservation gains for three large ocean regions

Pew's international fisheries project and its partners secured key conservation measures at three international regional fisheries management organizations (RFMOs) that will improve the longterm health and resilience of large-scale fisheries and ecosystems across the Atlantic and Pacific oceans.

- In November, the North-East Atlantic Fisheries Commission became one of the first RFMOs to commit to adopting ecosystem-based management and to integrate climate change factors into fisheries management decisions.
- Also in November, the International Commission for the Conservation of Atlantic Tunas adopted 20 binding measures to improve management of tunas, swordfish, marlin, and sharks, including better electronic monitoring standards for these fisheries. The commission also agreed to ban the catch of devil rays, manta rays, and whale sharks in the Atlantic, which, when combined with measures previously secured by Pew and its partners at other RFMOs, will protect these species across 90% of the global ocean.
- In December, the Western and Central Pacific Fisheries Commission adopted a harvest strategy for north Pacific albacore, a move that means that now half of the world's tuna catch is managed through science-based control rules, contributing to economic stability and food security in coastal communities around the world and sustainability in the marine environment.

New tools help states' long-term budget analysis

At a Pew-sponsored webinar in November attended by officials from 34 states, Pew's state fiscal policy project introduced two analytical tools that states can use to determine if their budgets are on a sustainable path. The tools-long-term budget assessments, which project revenue and spending years into the future, and budget stress tests, which estimate the size of temporary shortfalls and gauge whether states are prepared for them—allow states to measure the risk of future budget deficits and prepare for or prevent them. These tools can help avoid painful consequences such as tax increases and service cuts that harm residents and local economies. The webinar previewed a 50-state report, "Tools for Sustainable State Budgeting," which defined these tools for the first time, identified which states use them, and proposed strategies to help states implement them effectively.

Pew research informs Massachusetts bill to establish disaster fund

In November, Massachusetts state Senator Joanne Comerford (D) and Representative Natalie Blais (D) hosted an event for legislators, stakeholders, and the public highlighting a policy proposal to create a state disaster fund and assistance program. Pew's managing fiscal risks project (formerly known as the fiscal federalism initiative) has been sharing research with Sen. Comerford's staff since early 2023, and the event included Pew's disaster budgeting report, "How States Pay for Natural Disasters in an Era of Rising Costs." That report named five common disasterfunding mechanisms, identified by Pew research and the Government Accountability Office: rainy day funds, statewide disaster accounts, transfer authority, supplemental appropriations, and state agency budgets.



A resident of Lynn, Massachusetts, navigates a street flooded by Tropical Storm Elsa in July 2021. Christiana Botic/The Boston Globe via Getty Images

Washington state protects three rivers as Outstanding Resource Waters

The Washington Department of Ecology in December designated more than 950 miles of the Cascade, Green, and Napeequa rivers as Outstanding Resource Waters, affording them the highest level of protection under the Clean Water Act. The designations, which will protect critical salmon habitat and waters spiritually significant to Tribal Nations, mark the first time Washington state has used this important tool to safeguard its freshwater ecosystems. Pew and its partners provided technical assistance and generated support from 240 local government and Tribal leaders and conservation, hunting and angling, outdoor recreation, and business organizations to secure these protections.

Pew's sentencing and corrections work featured at national convening

In December, Pew's public safety performance project co-hosted the National Summit to Advance States' Criminal Justice Priorities, partnering with the U.S. Department of Justice's Bureau of Justice Assistance, Arnold Ventures, the Crime and Justice Institute, the Council of State Governments Justice Center, and the Center for Naval Analyses' Center for Justice Research and Innovation. Among the more than 500 attendees were legislators and policymakers from nearly every state. The event highlighted Pew's contributions to the field over the past 17 years, including a spotlight on its 2008 report "One in 100: Behind Bars in America," which both provided data showing that 1 in every 100 American adults was confined in a jail or prison and articulated a clear problem statement about the need to address correctional populations and costs nationwide. In addition to increasing national understanding of the issue, Pew's history of diagnosing the factors driving prison growth in individual states and providing policy audits to identify options for reform, drawing on solid research, promising approaches, and best practices, was highlighted, with a number of state-specific examples. Lastly, the event provided an opportunity to publicly introduce Arnold Ventures as the new private sector partner in the Justice Reinvestment Initiative, ensuring that critical efforts to assist states with data-driven sentencing and corrections policy change will continue.

INVIGORATING CIVIC LIFE

Report highlights how Philadelphia has changed in 75 years

To help mark its 75th anniversary, Pew in December released "10 Ways Philadelphia Has Changed in 75 Years," a report examining trends and changes in Philadelphia. Pew was founded in Philadelphia in 1948, and the report examined indicators from the Philadelphia research and policy initiative's annual "State of the City" to highlight key changes over time, such as rising educational attainment, an increasingly diverse population, and changes to dominant industry, from manufacturing to education and medicine. It also featured historic photos and U.S. Census maps and highlights Pew's commitment to its hometown for 75 years.



Accelerator workshops help prepare Philadelphia's incoming administration

Through a partnership with the William Penn Foundation, Pew launched the 2024 Accelerator: City Budget and Policy Workshops to inform and support Philadelphia's incoming mayoral administration and city council members. A total of five sessions, hosted in November, December, and January, focused on municipal finance and public policy and how elected officials generate, allocate, and manage the dollars needed to provide high-quality services for residents, advance an equitable recovery from the pandemic, and ensure opportunity for all residents. The sessions highlighted Pew's research and featured panels with national and regional experts on public policy. The sessions featured speakers highlighting local policy, including Marisa Waxman, executive director of the Pennsylvania Intergovernmental Cooperation Authority; Jodie Harris, president of PIDC, Philadelphia's public-private economic development corporation; and Chellie Cameron, president and CEO of the Chamber of Commerce for Greater Philadelphia. Attendees included then-Mayor-elect Cherelle Parker and then-incoming council president Kenyatta Johnson; there was also strong participation and engagement from current and incoming council members and administration officials.

INFORMING THE PUBLIC

Parents, young adult children, and the transition to adulthood

In January, Pew Research Center released a report exploring the relationship between U.S. parents and their young adult children ages 18-34. As parents watch their young adult children navigate the transition to adulthood, they're feeling more proud and hopeful than disappointed or worried. And they're highly invested in how life turns out for their kids. Most parents of young adults (71%) say their children's successes and failures reflect on the job they've done as parents. This is especially true of upper-income parents.

A pair of new surveys from the Center finds that the lives of parents and their young adult children are closely knit together through emotional and financial ties. In addition, a Center analysis of government data showed the shares of today's young adults reaching certain key milestones—such as marriage and college completion—and how that compares with 30 years ago, when their parents were around the same age.



Global views of democracy

As more than half the world's population votes this year in elections that could shape the future of democracy, Pew Research Center released a comprehensive data package looking at the views of people in 24 countries on the state of democracy and political representation.

The first release, in February, found that enthusiasm for representative democracy has slipped in many nations since 2017, but most still believe it is a good way to govern. However, some also are open to other forms of nondemocratic governance. People also say that their country would be better off if more women, people from poor backgrounds, and young adults held elective office.

In March, the Center released an analysis exploring the many ideas people have, in their own words, for making democracy in their country work better. The report, "What Can Improve Democracy?," finds that across 17 topics analyzed, better or different politicians are most frequently mentioned. An accompanying data essay, "How People in 24 Countries Think Democracy Can Improve," showed a range of the ideas people have to improve their democracy.

END NOTE

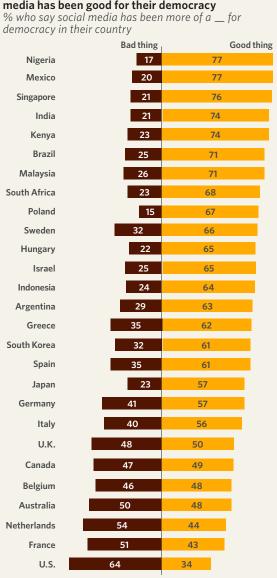
Majorities in Most Countries Surveyed Say Social Media Is Good for Democracy—but not in the U.S.

As social media use becomes more widespread globally, people in 27 countries surveyed by Pew Research Center in 2022 and 2023 generally see it as more of a good thing than a bad thing for democracy. In 20 of these countries, in fact, majorities say social media has benefited democracy in their nation.

People in emerging economies are particularly likely to say social media has advanced their democracy. Assessments are especially positive in Nigeria and Mexico, where nearly 8 in 10 (77% each) say social media has had a positive effect on democracy.

People are far less certain in other countries, including the Netherlands and France, where more say social media has had a negative effect on democracy than say it's had a positive effect.

Meanwhile, Americans are the least likely to evaluate social media positively. Just 34% of U.S. adults say social media has been a good thing for democracy in the United States, while nearly twice as many (64%) say it has been a bad thing. And Republicans are more critical than Democrats about the impact of social media.

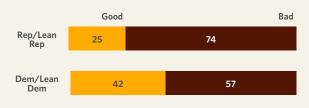


In most countries surveyed, large shares say social

Note: Those who did not answer are not shown. Source: Pew Research Center Spring 2023 and Spring 2022 Global Attitudes surveys

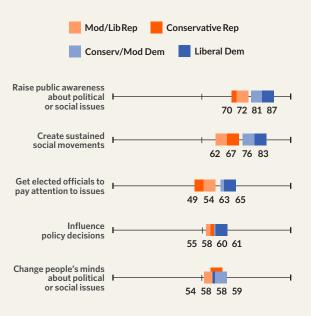
Republicans are more critical than Democrats of the impact of social media on American democracy

% of __ who say social media has been more of a __ thing for democracy in the U.S.

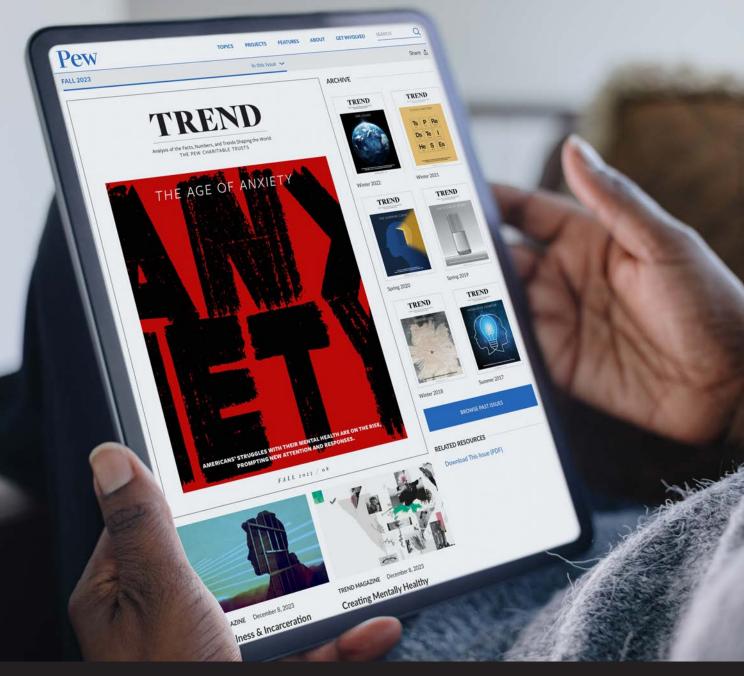


Source: Pew Research Center Spring 2022 Global Attitudes Survey

Republicans are less likely than Democrats to say social media is an effective tool for political change % who say social media is an **effective** way to __, among ...



Source: Pew Research Center Spring 2022 Global Attitudes Survey



The Age of Anxiety

As Americans struggle with their mental health, Pew's latest issue of *Trend* offers essays from expert contributors on how to improve care, increase the resilience of young people, and create mentally healthier workplaces.

Read more at pewtrusts.org/trend





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A plethora of gentoo penguins populate Antarctica's Cuverville Island.

A Journey to Earth's Last Great Wilderness Page 30