INSIDE

The Pew Charitable Trusts

Trust

The Keepers of the Outback

Working to save Australia's final frontier

Fall 2017 | Vol. 19, No. 4

TIME CAPSULE

PEW FOUNDERS

MABEL PEW MYRIN

Mabel Pew Myrin and her sister and two brothers established the seven charitable trusts that today form The Pew Charitable Trusts. The youngest of the four children of Joseph and Mary Anderson Pew, she and her husband, H. Alarik W. Myrin, devoted themselves to what she called "issues of survival." These included cultivating healthier and more abundant food through soil conservation as well as inspiring creative young minds through new and innovative curricula. She was particularly interested in the methods of the Waldorf curriculum, in which imagination and hands-on skills are integral to learning. The Myrins founded several schools, including the Kimberton Waldorf School in the Philadelphia suburbs, which is the second-oldest Waldorf school in North America. Mabel also supported arts and culture, including serving as president of the Lyric Opera Company of Philadelphia. And she made lifesaving contributions to major health care institutions and was a trustee of Penn Presbyterian Medical Center in Philadelphia.

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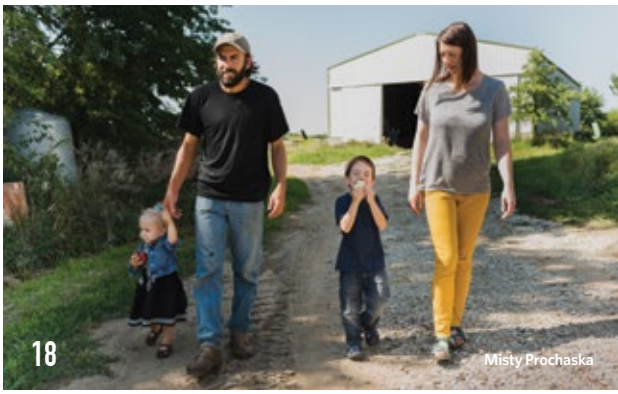

Cover photograph by Kerry Trapnell

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The Pew Charitable Trusts is a public charity driven by the power of knowledge to solve today's most challenging problems. Working with partners and donors, Pew conducts fact-based research and rigorous analysis to improve public policy, inform the public, and invigorate civic life.

Pew is the sole beneficiary of seven individual charitable funds established between 1948 and 1979 by two sons and two daughters of Sun Oil Co. founder Joseph N. Pew and his wife, Mary Anderson Pew.

Seeing What's Not in Plain Sight

This year marks the 200th anniversary of the birth of Henry David Thoreau, a keen observer of nature and society whose two-year retreat on Walden Pond inspired generations of environmentalists. When his sojourn was over, he wrote, "It's not what you look at that matters, it's what you see." This advice is fundamental to the mission of The Pew Charitable Trusts. Looking is never enough. In order to see—and understand—we have to dig deeper, listen to all sides, and ensure that our work rests on a foundation of rigorous, nonpartisan, and evidence-based research.

Sometimes that research takes the form of large surveys, data analysis, and partnerships with other nonprofit organizations dedicated, as we are, to science, measurable outcomes, and public service. But individuals acting as Thoreau did, on their own and with a passion for sharing what they learn, can both see what others might miss and bring new perspectives to persistent challenges.

One such individual is Ann Ballinger, who lives on a 27,000-acre ranch in the Australian Outback called Stockholm Station. She was profiled in *My Country, Our Outback*, a major report we released earlier this year that brings to the discussion about the Outback's future the experiences and insights of people who live there. The report is part of Pew's continuing effort to preserve this vast natural landscape, in part by spotlighting people who see the beauty of—and the threats to—that landscape every day.

As someone who loves the Outback and has spent her life farming the land, Ann understands how the region is changing, endangered by invasive species, feral animals, and severe drought. But while others might look at the Outback and find only a vast expanse of arid land, Ann sees a welcoming region that needs people. She can also spot opportunities that will help conserve the environment: the huge amounts of carbon stored in grasslands; new alternative energy sources, especially solar panel farms; and the development of high-speed internet and telecommunications technology that will allow far-flung residents to live in the Outback and still be connected to the rest of the world. Her unique point of view is highlighted in our cover story.

Antibiotic resistance also requires seeing beyond the headlines and developing a deeper understanding of what the data are telling us. Antibiotic-resistant infections are a global threat, sickening at least 2 million people and killing 23,000 in the United States alone each year. But mothers, fathers, doctors, veterans,

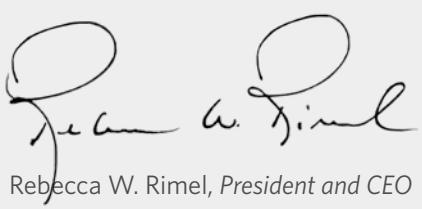
In order to see—and understand—we have to dig deeper, listen to all sides, and ensure that our work rests on a foundation of rigorous, nonpartisan, and evidence-based research.

and farmers have formed an alliance, using their own experiences to find solutions and get the word out about the need to use antibiotics responsibly, spur the discovery of new drugs, and increase federal funding to combat resistant bacteria. In this issue, you'll meet some of these superheroes against superbugs, like Christopher Linaman, who almost lost his life to methicillin-resistant *Staphylococcus aureus* (MRSA), an infection that resists many antibiotics. After his recovery, he joined forces with Pew, and through his position as executive chef at the Overlake Medical Center in Bellevue, Washington, he is also working to ensure that patients eat meat and poultry from producers who use antibiotics responsibly.

The Pew Research Center also looks for new insights. Police-involved shootings, for example, have been much in the news over the past several years. But until January, when the center issued a survey of nearly

8,000 policemen and women, there was little evidence-based data showing how these fatal encounters have affected the way police officers do their jobs. The center's research found that two-thirds of the officers characterized these encounters as isolated incidents and not signs of a broader divide between police and the black community. Those results contrast sharply with the views of the general public; a separate center survey found that 60 percent of U.S. adults say the incidents are symptoms of a deeper problem. You'll learn more about the police survey, and see more deeply how police officers view their jobs, in this issue of *Trust*.

Although Thoreau grew up in a young and maturing nation, his counsel that knowledge is not always in plain sight remains just as valid as we confront the challenges of our own age. He was also unafraid to speak truth to power. Those principles resonate in Pew's work, where our response to any difficult problem is based on rigorous research that allows us to see solutions that might not have been readily obvious. In the words of another great American, Thomas Jefferson, we follow the truth wherever it may lead.



Rebecca W. Rimel, *President and CEO*

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THE BIG PICTURE

These guanacos, which are similar to llamas and alpacas, live in the Patagonia region of Chile, one of the planet's most remote landscapes. It is bordered on the east by the Andes Mountains and Argentina, and stretches north from Cape Horn to the mountain gateway city of Puerto Montt. With icy glaciers, rugged coastland, wild fjords, and vast grasslands, the Chilean Patagonia is one of the world's last unspoiled areas, rivaling Australia's Outback and Canada's boreal forest. Pew has begun work with partners in Chile to help keep Patagonia pristine, seeking improved management of national reserves and expanding protected areas that connect the land and sea.

Art Wolfe/Mint Images/Aurora

A break across the Larsen C Ice Shelf as seen from a NASA research aircraft in November. *NASA*

Ice Shelf Collapse Highlights Need for Expanded Marine Protections

BY ANNE USHER

In July, after weeks of separating at a rate of 30 feet a day, an iceberg bigger than Delaware broke free from the Antarctic Peninsula and began slowly drifting into the Weddell Sea. The trillion-ton iceberg is among the largest ever to sever from the continent.

It's the third area since 1995 to break from the Larsen Ice Shelf, which lines the northeastern coast of the peninsula and is named for Norwegian explorer and whaler Carl Anton Larsen, who led an expedition to Antarctica in the late 1800s. The three shelves, including a 2002 break that removed a part of the shelf that had existed for more than 10,000 years, have disintegrated in a southerly progression from the peninsula's tip. July's came in the area known as Larsen C.

Like all ice shelves, Larsen C floats on the water, so the iceberg's break-off will have a negligible effect on sea level rise. But these floating platforms of ice block the continent's glaciers in. If these ice shelves collapse, the glaciers can flow into the ocean, contributing significantly to sea level rise. Larsen C does not hold back a great deal of land ice, but researchers are concerned about Thwaites Glacier in West Antarctica, which could raise sea levels by 10 feet if it collapsed.

While there is no definitive proof that climate change caused the Larsen C break, which shrank this shelf by more than 12 percent, rising ocean temperatures are making the ice shelf it broke away from more vulnerable to such fissures. Scientists report that new cracks are forming. The remaining ice sheets covering much of Antarctica are also thinning, and modeling shows that if the current rate of warming continues, the ice sheets could undergo catastrophic melting.

Melting ice sheets will have another effect, beyond sea level rise: They will release enormous amounts of freshwater into the sea—which, scientists say, will alter the Southern Ocean's currents that carry critical nutrients to the rest of the world's seas.

One way to blunt the effects of warming waters in Antarctica—and help ocean ecosystems build more resilience—is to expand the number of marine protected areas (MPAs) in the region. This would protect thousands of marine species, including Antarctic krill—tiny shrimplike crustaceans at the center of the Southern Ocean food chain that store up to 23 million tons of carbon, equivalent to that produced by 35 million cars per year, in the deep ocean. Penguins and whales feed on krill, whose numbers have dropped an estimated 80 percent since the 1970s in the wake of warming waters, a decline in sea ice, and an increase in commercial fishing.

The Pew Charitable Trusts, together with partners in the Antarctic and Southern Ocean Coalition, is encouraging the Commission for the Conservation of Marine Living Resources to create this MPA network, which it committed to doing in 2009, by 2020. In October 2016, the commission's 25-member body took the first step by establishing the Ross Sea MPA—the largest on the high seas.

Andrea Kavanagh, who directs Pew's global penguin conservation program, says the commission's next step should be to designate MPAs in East Antarctica, the Weddell Sea, and the Antarctic Peninsula.

"Extending the MPA networks across the Southern Ocean would help protect krill—and the millions of penguins, whales, and other species that feed on them," Kavanagh says. She noted this would also give marine species more protection as they migrate, breed, and forage.

The remaining ice sheets covering much of the continent of Antarctica are also thinning, and modeling shows that if the current rate of warming continues, the ice sheets could undergo catastrophic melting.

Stronger MPA networks are especially critical to easing some of the outside pressures—such as commercial krill fishing—on Antarctica's wildlife, giving it more time to adapt as sea ice disappears. In one region, Pew marine fellow Yan Ropert-Coudert found that 26,000 breeding pairs of Adélie penguins lost all of their chicks during two recent breeding seasons, which the scientist attributes to their changing climate.

Extensive MPA networks, Kavanagh says, "would help mitigate the effects of warming in the Antarctic and create a better future for wildlife and all who rely on a healthy global ocean."

Around the Globe, More Name U.S. Over China as Top Economic Power

Across 38 nations, a median of 42 percent say the United States is the world's leading economy, while 32 percent name China, according to a Pew Research Center report released in July. Across the countries surveyed in Latin America, as well as most in Asia and sub-Saharan Africa, respondents tend to believe the U.S. is the top economy. Americans also name their own country over China by a 51 percent to 35 percent margin.

But China is considered the leading economic power in seven of the 10 European Union nations in the study (in Italy, China and the U.S. are tied). A plurality in Russia also holds this view. And China leads the U.S. by a 2-1 margin in Australia—a longtime U.S. ally but whose top trading partner by far is China.

Over the past year, perceptions of relative U.S. economic power have declined in many of America's key trading partners and allies. The trend can be seen in several European countries, where views about the economic balance of power have fluctuated in recent years. Following the onset of the financial crisis nearly a decade ago, Europeans increasingly named China, rather than the U.S., as the world's leading economic power. But as the American economy slowly recovered in recent years, the pendulum began to swing back in the direction of the U.S. This year, however, the pattern has reversed itself again, with countries such as Germany, the United Kingdom, and Spain seeing China once more as occupying the top spot. But these shifts are not limited to Europe; perceptions have also changed significantly in countries such as Canada, Brazil, Mexico, and the Philippines.

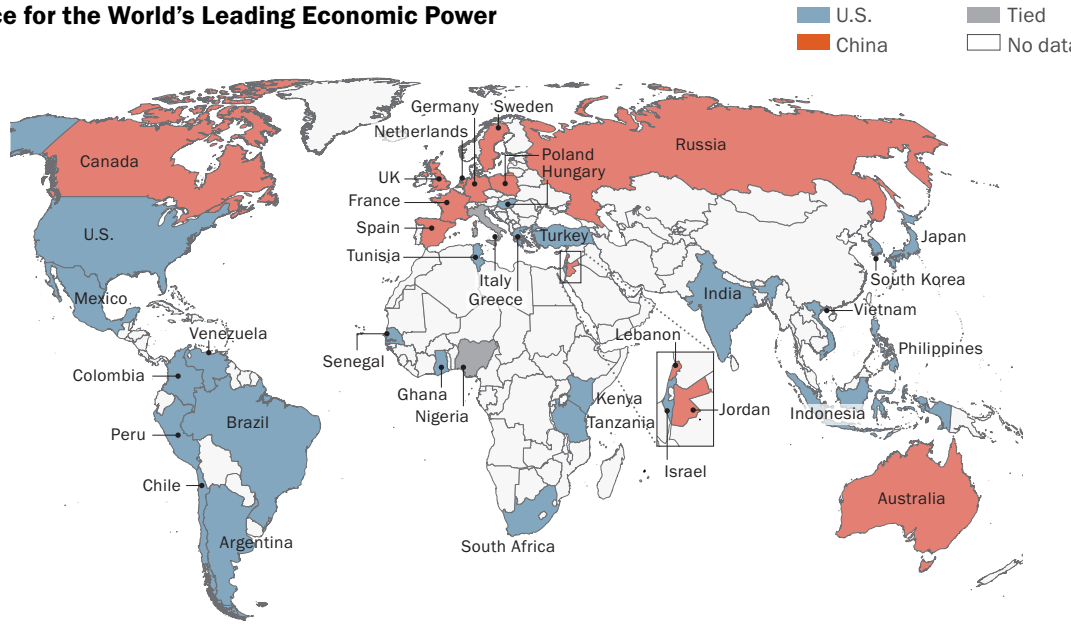
On balance, people around the world tend to share positive views of China. A median of 47 percent across the 38 nations polled have a favorable opinion of that country, while 37 percent have an unfavorable one. Global ratings for the U.S., which have declined sharply over the last couple years in many countries, look very similar: A median of 49 percent see the U.S. in a positive light, while 39 percent offer an unfavorable view.

At the regional level, China receives its most positive ratings in sub-Saharan Africa, where it has invested heavily in recent years. At 72 percent, Nigerians' assessment of China is the most positive on the survey. The only other country where at least 7 in 10 express a favorable opinion is Russia (70 percent).

While Europeans are divided on China, the share of the public with a positive view has nonetheless increased significantly in some countries, including Spain, France, and the U.K. Opinions have moved in the opposite direction in several major Asian nations, with a particularly steep decline in South Korea. Drops were also significant in Indonesia, India, and Vietnam.

Individual liberty is one issue on which America has a much stronger global image than China. Across the nations polled, a median of 54 percent say they believe the U.S. government respects the personal freedoms of its people. Just 25 percent say this about the Chinese government. *—Demetra Aposporos*

Top Choice for the World's Leading Economic Power



Source: Pew Research Center

Flood Risks for the Nation's Schools

When students returned to school this fall, nearly 4 million of them went to buildings that have repeatedly flooded or face a high risk of flooding.

And they aren't all in coastal areas. An analysis by Pew and research partner ICF found that many inland public schools also face a high probability for flooding. The researchers mapped counties with a high risk and developed a county-level flood risk score for public schools around the nation.

One hundred counties in 23 states—with a total of 6,444 schools—received the highest possible scores for flooding risk. And Louisiana was home to more of these counties than any other state.

"When flooding forces schools to close, learning is disrupted, daily life is upended, and communities face steep repair costs," says Laura Lightbody, who directs Pew's flood-prepared communities initiative. "Unfortunately, many of today's schools are not built to withstand severe weather or changing patterns of land use and demographics."

The report highlighted three schools recently inundated that have taken steps to reduce future risk. In McDowell, Kentucky, a 2013 flood left an elementary school built in the 1930s under 8 inches of water and mud. Relocating the school was less costly than expenses for operations, maintenance, and repeated cleanup at its first location.

Michael B. Thomas/Getty Images

After days of torrential rainfall, floodwaters encroach on the campus of Eureka High School in Eureka, Missouri, on Dec. 31, 2015, after record crests of the Mississippi, Missouri, and Meremec Rivers.

A 2010 storm brought the fourth bout of flooding to a Milwaukee-area high school, leading the school board to improve stormwater management; those efforts cut annual insurance costs by 40 percent. And after three days of storms in 2015 caused historic flooding at the high school in Eureka, Missouri, and more flooding occurred after storms last spring, local officials began mitigation plans.

Even before this summer's historic floods in Texas and Florida, Pew's project has been supporting efforts to renew the National Flood Insurance Program, help communities improve infrastructure, and encourage nature-based solutions rather than man-made bulkheads and other measures.

—Daniel LeDuc

Guidance for Small Hospitals to Improve Antibiotic Use

Improving the prescribing and use of antibiotics in hospitals is essential to help ensure quality care for patients and slow the spread of antibiotic-resistant bacteria, which is a growing public health concern. But small, local hospitals that largely serve remote and rural communities across the U.S.—and in 2015, nearly three-fourths of the nation's hospitals had fewer than 200 beds—often have limited personnel and resources to implement programs aimed at improving antibiotic use. Frequently there is no one on staff or available for consultation who has experience with infectious diseases or the deep expertise to institute procedures for administering antibiotics that are often rooted in the experiences of large or academic health care centers.

As part of an ongoing collaboration to improve the stewardship of lifesaving antibiotics, The Pew Charitable Trusts and the Centers for Disease Control and Prevention have worked with partners to develop a guide that can help smaller hospitals. With proper use of antibiotics, the risk of antibiotic resistance—a growing, worldwide public health concern—can be reduced. (See Page 18.) Crafted in consultation with staff from small hospitals, the guide identifies such stewardship strategies as monitoring antibiotic use and educating hospital staff, and even offers some treatment guidelines, such as how many days to treat a specific infection with antibiotics and what to watch for in a patient's response to treatment.

"This publication helps provide specific, practical guidelines for how smaller facilities can better serve their patients using proven, cutting-edge science that will help to preserve the efficacy of antibiotics for as long as possible," says David Hyun, who works on Pew's antibiotic resistance project.

—Demetra Aposporos


INSIDE THE
OUTBA

Australia's Outback—the country's vast, wild, beautiful heartland—is one of the few large-scale natural regions left on Earth. An area of stark contrasts, alternately lush and inhospitable, it supports people, jobs, and economies as well as a rich and biodiverse landscape filled with some of the world's most unusual plants and animals.

Today, though, it is under threat. Across much of the Outback, there are fewer people managing the land than at any time in world history, which is causing problems such as the uncontrolled spread of feral animals, noxious weeds, and wildfires. This land needs people. It has been home to Indigenous Australians for more than 50,000 years; they have shaped and nurtured the landscape, and had their identity and culture shaped by it in return.

Pew works to conserve this critical region of the world and recently issued a report, *My Country, Our Outback*, that celebrates the relationship of people with the land by profiling those who live and work in the Outback, and are attempting to carry it safely into the future.

FIRST IN A SERIES

CK

By Daniel Lewis | Photography by Kerry Trapnell

A worker herds cattle by motorbike—one of many innovative ways that people manage and sustain the land across Australia's Outback today.

Ann Ballinger is a rebel with causes. She defied the expectations of many when she chose to keep running the 27,000-acre Stockholm Station ranch in western Queensland by herself after the sudden death of her husband, Bill, in 2000.

Her causes have included everything from the local sheep show to mental health and the environment. But above all, she's always been an evangelist for life in the Outback. It has been her beloved home for most of her life, and she hates to see it depicted as hellish instead of heavenly.

Ballinger yearns for an Outback where there are many more people enjoying its charms, as she does, in order to make it more environmentally, socially, and economically sustainable. She believes the best solution for safeguarding the Outback's environmental health is to have more people living in it and managing it appropriately.

"The greatest asset we have is people, and when my generation goes, there'll be a new breed of young people coming through, and with them will come enthusiasm and confidence," she says. "And that's what the Outback needs—an injection of confidence and enthusiasm."

Ballinger is intensely passionate about the kind of lifestyle Outback living can offer to anyone prepared to give it a try. "It's a fantastic place to live in and to bring up families," she says. "I know what a great life it offers and how lucky we are to live here. And sadly, so much of the rest of Australia doesn't recognize it. They see all the negative things like snakes and dying of thirst and the isolation."

RESIDENT APPEAL

Just as Ballinger has a son who has gone to live in a big city and loves it, she believes there are plenty of city kids who would fall in love with the Outback if they experienced it.

"A good example of that is when teachers come to these parts," she explains. "When they find out they have been posted to somewhere remote, they spend the rest of their summer holidays in tears. But when they get here, they have the most wonderful time, because everyone's so friendly. One of my main goals is to get across to people that it's a good life here in the Outback. We don't tell people enough about it."

She believes that if enough people resided in the Outback, all would be good. "People create industry. Get the people here and the rest will look after itself."

She hopes more Outback residents will share their

stories on social media and help overcome the negative perceptions that urban people hold toward remote Australia. She would also love to see a high-quality TV miniseries about Outback life. "I think people would love to look into our lives more," she says.

If a camera were to peer into Ballinger's life, it would show her tackling Stockholm's biggest threat, prickly acacia, in the cool of the early morning—spreading pellets and spraying from her four-wheel motorbike to kill off the invasive weed. It wouldn't show her covered in dust and sweat, straining against a fence in the baking heat of the afternoon, though. That's when she takes her daily siesta in the air-conditioned comfort of her homestead.

The camera would find her in her office doing important work on the phone or the computer for farming and natural resource management support groups. At sunset it would show her sitting beneath the deep eaves of her veranda, nursing an ice-cold can of beer as she gazes over a breathtakingly vast paddock of golden Mitchell grass and kangaroos drinking from a pond.

This end of the house was once the post office in nearby Muttaburra but was hauled out to Stockholm to become the homestead in 1936. Its pastel colors, high ceilings, rural curios, corrugated iron, art, nooks and crannies, peeling paint, farm furniture, and knickknacks all come together beautifully in what could best be described as bohemian Outback style.

The view from the veranda also includes the tennis court; flowering bougainvillea, frangipani, and poinciana; fruit trees; tall gums; and a patch of green grass. In this environment of extremes, Ballinger is particularly proud of the many trees she has planted and nurtured to maturity.

Indeed, Stockholm Station feels every bit as charming and sophisticated as its Scandinavian namesake.

This tidiness wasn't evident when her husband was alive. "It's what happens when a woman gets in charge," Ballinger confirms. She believes tidiness and image aren't just there to make one feel good—they are key factors in running a successful business and in making the Outback a beautiful place to live.

FUTURE VISION

Ballinger can't understand why Outback Queensland can't win people back by once again embracing some of its former industries. She also sees a fantastic future in new industries such as alternative energy. A massive $70 million, 80,000-panel solar farm is already planned for the nearby town of Barcaldine.

But the most important requirement for building a

Left: Ann Ballinger surveys her property and home for decades, the 27,000-acre Stockholm Station ranch in western Queensland. The Outback is "a fantastic place to live in and to bring up families," she says. "And sadly, so much of the rest of Australia doesn't recognize it." Below: Ballinger tosses poison pellets to help control the spread of prickly acacia, a major invasive species across the Outback.

vibrant Outback, she believes, is cutting-edge internet and telecommunications technology that will enable people to reside there while making a living through connecting with the world. "We don't have to stick solely to these industries," Ballinger says of wool and beef.

Add to that education and best-practice resource management and you have Ballinger's recipe for maintaining an economically and environmentally sustainable landscape in this part of the continent.

Right now, though, things are pretty bleak in the Muttaburra district. Drought has hit hard—some say it's the worst anyone can remember. By late 2015, more than 80 percent of Queensland had been classified as drought declared—the biggest portion of the state ever to be covered by this official proclamation of rural hardship.

Struggling farmers who qualify can get tens of thousands of dollars in drought assistance to keep going. There are drought fundraisers going on in the cities, and a rural debt and drought task force is touring Outback centers trying to come up with solutions. The Rotary Club is putting on an outdoor cinema night near Muttaburra to get people off their properties and lift their spirits.

Stockholm Station is looking better than most in the district, but even here can be found all the stereotypical features of an Outback drought: dust, dung, patches of bare earth, baking heat, shimmering mirages, empty dams, dry creek beds, flies, gaunt livestock, barbed wire, emaciated kangaroo carcasses. A headline in *The Courier-Mail* newspaper declares: 'Queensland drought crisis: families suffer Third World-like malnutrition.'

That kind of media report causes Ballinger angst. She despairs that such images are constantly shown to metropolitan Australia as being synonymous with Outback life, where life is a constant struggle, people rely on the charity of others, and the climate is relentlessly brutal.

Work is constant on Stockholm Station as Ballinger repairs fences and fixes pumps. But she wants more people to hear about the joys of living in the remote region, too.

Colorful, boisterous birds called galahs congregate around a dam at Stockholm Station, where they arrive to find water.

Ballinger wants people to also hear about the fun times, like the night out at the Muttaburra pub for a neighbor's birthday. Outback people know how to party, even when times are tough. She would also love urban people to experience all the fun at Muttaburra's biggest event, the Landsborough Flock Ewe Show, with its livestock competitions, fashion parade, and entertainment. "The main reason for holding the show is for people to get together," she says. "It does everyone a lot of good to have a nice day out."

PASSIONATE PURSUITS

But even retaining residents who are born to the Outback life is proving to be a challenge. Despite Ballinger's passion for the country life and what she says were idyllic lives growing up on Stockholm Station, only one of her three adult children still lives in the Muttaburra district. A sign outside the only pub says Muttaburra once boasted six hotels, but that was back in 1890. Today it's a village of about 60 people.

Ballinger says life has been lonely at times, and it has been hard managing Stockholm by herself. She has had to do some things she had never done before, such as kill and butcher livestock. And her work includes driving trucks and tractors, fixing fences, pumps and pipes, distributing blocks of lick to the cattle, and cleaning out stock troughs.

Still, she has relished the challenge of running an Outback station on her own. "I've always felt quite confident," she says. "It's been interesting and enjoyable. I wouldn't have stayed here if it wasn't."

On Stockholm, Ballinger controls feral pigs and wild dogs, but prickly acacia takes up much more of her time. "It's a fantastic stock feed," she says—full of protein—but it eventually forms an impenetrable, thorny scrub that outcompetes all native plants. Imported into Australia as a shade and fodder tree in the 1960s, prickly acacia is now considered one of the worst invasive weeds in the country. It has been declared a Weed of National Significance [considered among the most difficult to eradicate] and is classified as a Class 2 pest plant in Queensland. Prickly acacia is also a major focus of Desert Channels, a natural resource management organization of which Ballinger is a board member.

Desert Channels works with landholders to resolve land management problems and issues such as weeds and feral animals. It's always on the lookout for innovative ways to address the common threats facing Outback land managers. It has its own expert team that

A brilliant night sky seems to watch over kangaroos that have come to drink from the dam at Stockholm Station, an example of magical moments on display in Australia's Outback—one of the few large-scale natural areas remaining on Earth.

attacks prickly acacia on thousands of acres each year in the southwest third of Queensland that drains toward the Lake Eyre basin. The team has even enlisted the help of a drone helicopter to intensify its war on the weed.

Ballinger is particularly full of praise for the mapping and control work that Desert Channels does to respond to threats from weeds and feral animals. The organization monitors and targets feral pigs over vast areas of the Outback, is helping to protect the recently discovered population of the mysterious night parrot, conducts studies on climate change, and runs public awareness campaigns to encourage pastoral activity that is good for the land and also good for the wallet.

Ballinger is looking forward to seeing a new generation of young land managers develop innovative practices that overcome the destructive cycle that often affects Outback farming enterprises—the high debt that leads to overstocking and a reluctance to thin herds when drought hits. That can lead to damage to the landscape and the inability of vegetation to recover when the rains return, resulting in even more debt for those young managers.

GRASS DELIBERATIONS

Ballinger is a big fan of providing education for pastoralists, such as the Grazing for Profit School, that stresses the link between economic and environmental

sustainability: the need to destock before doing long-term damage to your land.

"They're simple things, but we make it seem so difficult," she says of some traditional approaches to pastoralism. "We're grass merchants, and without the grass we can't do anything—our whole livelihood depends on having enough grass. We've got to look after that first."

Ballinger says the pattern that has been established during a hundred years of mostly unsustainable pastoralism has to be broken by putting the environment first; then the other things will look after themselves.

The top 20 percent of farmers—those who are always doing well financially—are testament to this philosophy, she says. That's why she believes it's crucial that governments subsidize education programs, because it's a small investment that will prevent billions of dollars' worth of land degradation and welfare support over the longer term.

Ballinger also dreams of a day when that same grass she nurtures can deliver her another income stream: cash for the huge amounts of carbon stored in its deep root systems.

She believes one of the biggest improvements to the Outback environment in recent years is the way people have embraced rotational grazing, in which livestock graze a small area for a short time before being moved on, allowing that land to recover before being grazed again. The grass is treated as the most precious commodity, not the livestock. "It's very obvious that it's certainly the way to go," she says.

Ballinger says a big part of the Outback's environmental problem is that "we're the most conservative people, but we're the biggest gamblers in the world. Our whole life depends on the weather. It's a total gamble."

Another of her projects is aimed at ending that game of chance. She's on a task force set up by the Queensland farmers' body, AgForce, that is working on solutions to help pastoralists in places like the Muttaburra district to drought-proof their properties.

She believes people are getting smarter, and the Outback environment is becoming healthier as a result. "People are grazing their land in a more sustainable way," she says. "They're more likely to sell [live]stock when things get dry, to protect their grass."

CATTLE CONNECTIONS

One of Ballinger's great fears for the sustainability of the Outback way of life is the perennial concern about reliable access to water. Stockholm and all the Muttaburra district stations are reliant on underground water from the Great Artesian Basin, and she worries that extensive drilling and fracking for coal seam gas could eventually cause the "poisoning" of that water source.

Standing beside her bore, Ballinger describes it as "the lifeblood of Stockholm," providing water for her livestock and also for the bounding kangaroos and dancing brolgas.

Like many other stations in the region, Stockholm made the transition from grazing sheep to cattle a few years ago. But even the cattle that graze on Stockholm these days aren't Ballinger's.

As part of her transition to eventually retiring and moving off the property, she has sold all her livestock and now earns her income through agistment—the money other graziers pay for having their cattle graze on her land. She photographs the cattle with her iPad and emails the images to their owners to show how they're doing.

While agistment is not as lucrative as having her own livestock, it means Ballinger doesn't have to worry about mustering and marketing anymore. It gives her more time to enjoy life and manage other income streams.

Ballinger says earning off-farm income is also a key to making a success of life in the Outback. Her off-farm portfolio includes investment properties plus a part share in the Muttaburra Motel, of which she says, "There's not much in it financially, but it's been a fantastic thing for the community." One of her investment properties is on the Sunshine Coast, which will one day become her home when she retires from Stockholm and leaves the Muttaburra district. Like so many others, Ballinger will eventually gravitate to the urbanized coast. She's sad at the prospect but appreciates the importance of being close to health services and other support in her retirement.

Regardless of where she ends up living in years to come, Ballinger says her heart will always be in the Outback. She'll never stop singing its praises in the hope that many others will eventually lose their hearts to it, too.

Daniel Lewis is an Australian writer and an author of My Country, Our Outback.

Chris Linaman preps a made-to-order cheeseburger for a patient at Overlake Medical Center in Bellevue, Washington. As the hospital's executive chef, Linaman supports growers and producers who raise food with the responsible use of antibiotics. He's also been dedicated to raising awareness across the country about antibiotic resistance ever since he spent four months battling a superbug that nearly cost him his life. *Lee Gillenwater/The Pew Charitable Trusts*

A SUPERHEROIC FIGHT AGAINST SUPERBUGS

BY CAROL KAUFMANN

Each year, antibiotic-resistant bacteria sicken 2 million Americans, killing 23,000 of them. Pew works to combat this growing threat with a group called Supermoms Against Superbugs—survivors, parents, doctors, farmers, chefs, and others who know firsthand about the dangerous bacteria.

Misty Prochaska for The Pew Charitable Trusts

Ellen Walsh-Rosmann, her husband Daniel, and their two children Xavier, 4, and Geneva, 1, check on a sow that is about to give birth on their certified organic farm in western Iowa. When Walsh-Rosmann was pregnant with her daughter, she developed kidney problems and had to use many antibiotics before doctors found an effective one—an experience that led her to join Supermoms Against Superbugs.

When Washington state resident Chris Linaman traveled this spring to the nation's capital to meet with members of Congress, he told the story of the basketball game that changed his life. Twelve years ago, the then athletic and healthy 32-year-old tore the ACL in his left knee, and like some 100,000 Americans do each year, he had surgery to repair it. But a few weeks later, his knee swelled to the size of "a bright red melon" and, he says, even grew hot to the touch.

Within hours, doctors diagnosed him with methicillin-resistant *Staphylococcus aureus* (MRSA)—a bacterium that's tough to treat because it resists many commonly prescribed antibiotics—and rushed him into emergency surgery, the first of several he would need over the next four days. Still, the bug persisted. Not long after he was sent home to recover, his wife found him nearly unconscious, and nearly unrecognizable, with a severely swollen face and a 105-degree temperature. The infection had become so severe that doctors told her to prepare for the worst. After more surgeries and antibiotics, Linaman's entire top layer of skin peeled off because of an allergic reaction to one of the antibiotics, leaving him even more vulnerable.

Eventually, doctors reined in the bacteria, but not without lasting effects. The episode took a financial toll on the family, he needed extensive physical therapy for his weakened leg muscles, and his young children didn't understand why their daddy couldn't wrestle with them like he used to.

Still, Linaman says, "as horrible as my MRSA infection was, I'm the good outcome—I survived. Way too many others have not. The number of people who die from antibacterial resistant infections each year is the equivalent to a 747 crashing once a week."

Simple infections, such as pneumonia or those in open wounds or the urinary tract, accounted for at least a third of all deaths in the United States before antibiotics such as penicillin revolutionized medicine in the decade after World War II. But as time progressed, there has been a downside: The more antibiotics are used—either in human medicine or in food-producing animals—the less effective they become as bacteria adapt and become resistant.

"Antibiotic resistance is a critical public health issue," says Kathy Talkington, who directs Pew's efforts to encourage development of new antibiotics and ensure proper use of the drugs in health care and food animal production. "If we don't have effective antibiotics, we jeopardize our ability to treat cancer, do heart transplants, perform joint replacements—all the basic kinds of health care." Leaders in the World Health Organization agree: In 2016, they called drug resistance a "major global threat" and estimated that it will kill 10 million people annually by 2050.

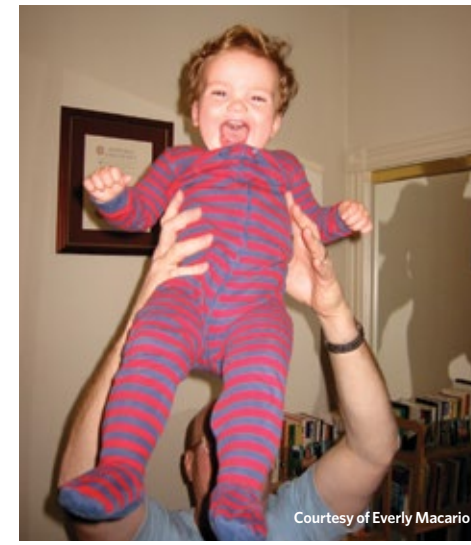
But conveying the magnitude of the problem has been difficult—and that's where Linaman and others in the Supermoms group come in. "They put a human face on a real problem," says Talkington.

Each year, the group comes to Washington to meet with members of Congress and their staffs, as well as with other policymakers working to address antibiotic-resistant bacteria.

They encourage funding for new antibiotics, noting that nearly every antibiotic in use today is based on discoveries from more than 30 years ago. They also urge that antibiotics be used judiciously and only when medically necessary in humans and food animals so that the drugs remain effective.

Lauri Hicks, an osteopathic physician and director of the Office of Antibiotic Stewardship at the Centers for Disease Control and Prevention, has worked on the antibiotic-resistant bacteria fight with Pew and says the Supermoms group has made a tremendous difference. "Personal stories are incredibly valuable," says Hicks. "It shows that this is something that can happen to anyone."

Everly Macario, a Chicago-based public health consultant and researcher, knows this all too well. Even with a doctorate in public health from Harvard University, she wasn't aware of antibiotic-



Courtesy of Everly Macario

Evelyn Hockstein for The Pew Charitable Trusts

Everly Macario (left) meets with Representative Rosa DeLauro (D-CT) on Capitol Hill to urge continued funding to fight the growing threat of antibiotic-resistant bacteria. When talking with members of Congress or other officials, Macario often shares the story of her son, Simon (top), who died suddenly from MRSA, an antibiotic-resistant bacterium, when he was 18 months old. "I'm doing what I can so that other people don't lose their children," she says.

resistant bacteria when her 18-month-old son, Simon, contracted an infection later identified as a new superbug, community-associated MRSA, in 2004. He died the day after he was admitted to the hospital.

Four years later, Macario began speaking publicly to raise awareness about antibiotic resistance and the need for more research funding, and in 2012, when the Supermoms initiative started, began traveling to Washington to meet with lawmakers.

"No one can imagine going back to pre-penicillin" days, she says. But she worries that is where the world may be headed.

Though initially discouraged by the slow-moving federal bureaucracy and legislative process, Macario says she has seen real progress in the past five years. One of the biggest improvements, she says, has been the commitment by poultry producers Perdue Foods and Tyson Foods, and by fast-food companies such as Chick-fil-A, Chipotle, McDonald's, Panera Bread, and Subway, to begin using and sourcing meat raised with responsible use of antibiotics. "The consumer … has spoken," says Macario. "Companies are changing. They have to adapt."

Chris Linaman also helps drive demand for responsibly raised food. Now the executive chef at Overlake Medical Center in Bellevue, Washington, he is known for his menus featuring meats and poultry from producers who use antibiotics responsibly, as well as for spreading the word at national conferences about the increase in antibiotic resistance.

While Linaman may be at the end of the food chain, serving up meals, other members of the Supermoms group are working right at ground level. One of them, Ellen Walsh-Rosmann from Harlan, Iowa, runs a farm with her husband, Daniel, and his parents that produces certified organic beef, pork, and eggs. They work 700 acres of certified organic corn, soybeans, small grains, popcorn, alfalfa, and pastureland. She also has two more jobs in the food chain, distributing food from 40 local producers to schools, grocery stores, and restaurants; and operating a food-to-table restaurant in Harlan, called Milk & Honey.

Like Macario and Linaman, Walsh-Rosmann has had personal encounters with antibiotic resistance. She watched her sister-in-law, who was battling cancer, contract hospital-acquired infections that antibiotics couldn't fight, complicating her condition. Walsh-Rosmann herself developed kidney problems when she was pregnant with her younger child. When her daughter was 5 weeks old, Walsh-Rosmann developed sepsis and went through several antibiotics before doctors found one that would work.

"What if there wasn't an antibiotic? I had a baby and a toddler," she says, echoing the fear any parent has of leaving a young child behind.

The welfare of children also motivates Shannon Ross, a pediatric infectious diseases specialist at the University of Alabama, Birmingham. "My worst fear as a doctor is not being able to treat a patient," says Ross, "and then having to tell the family that there are no options."

Ross signed on as a Supermom "to have an impact, on a broader scale, on the whole antimicrobial-resistance crisis," she says. "As a pediatrician, it's also important to educate from the children's perspective because it is such a different population of patients." Young children simply have fewer antibiotic options than adults because not as many are approved for use in kids.

And, like most of the Supermoms, Ross has a personal motivation. "My daughter is allergic to some classes of antibiotics," Ross says, "so if she were to get a serious infection, she may not already be able to get all the antibiotics available. And if it's a resistant organism, there are even fewer options. If my kids were

Rob Culpepper for The Pew Charitable Trusts

Shannon Ross, a pediatric infectious disease specialist, believes education is key to fighting superbugs. "Patients and parents can be an important part of the antimicrobial stewardship team," she says. "When patients are seeing physicians, it's always prudent to ask, 'Do I absolutely need this antibiotic?'" Patients should never assume that a cold or a sniffle always warrants an antibiotic, she says.

to become sick, I would want to make sure that they have choices."

She says many parents are shocked when they find out that not all infections can be treated by antibiotics. But it is a sad lesson that some families have learned.

A few months after 27-year-old Carl Romm came home to Sparks, Nevada, after an honorable discharge from the Army, he was diagnosed with a strain of *Staphylococcus aureus*, a bloodstream infection that was resistant to vancomycin, an antibiotic usually given as treatment. After numerous hospital trips and surgeries, he developed further antibiotic-resistant infections and died of cardiac arrest, a consequence of heart inflammation caused by the infections.

"Naively, I thought whatever he gets, they have something for him," says his mother, Joyce. "I thought they had a cure for everything."

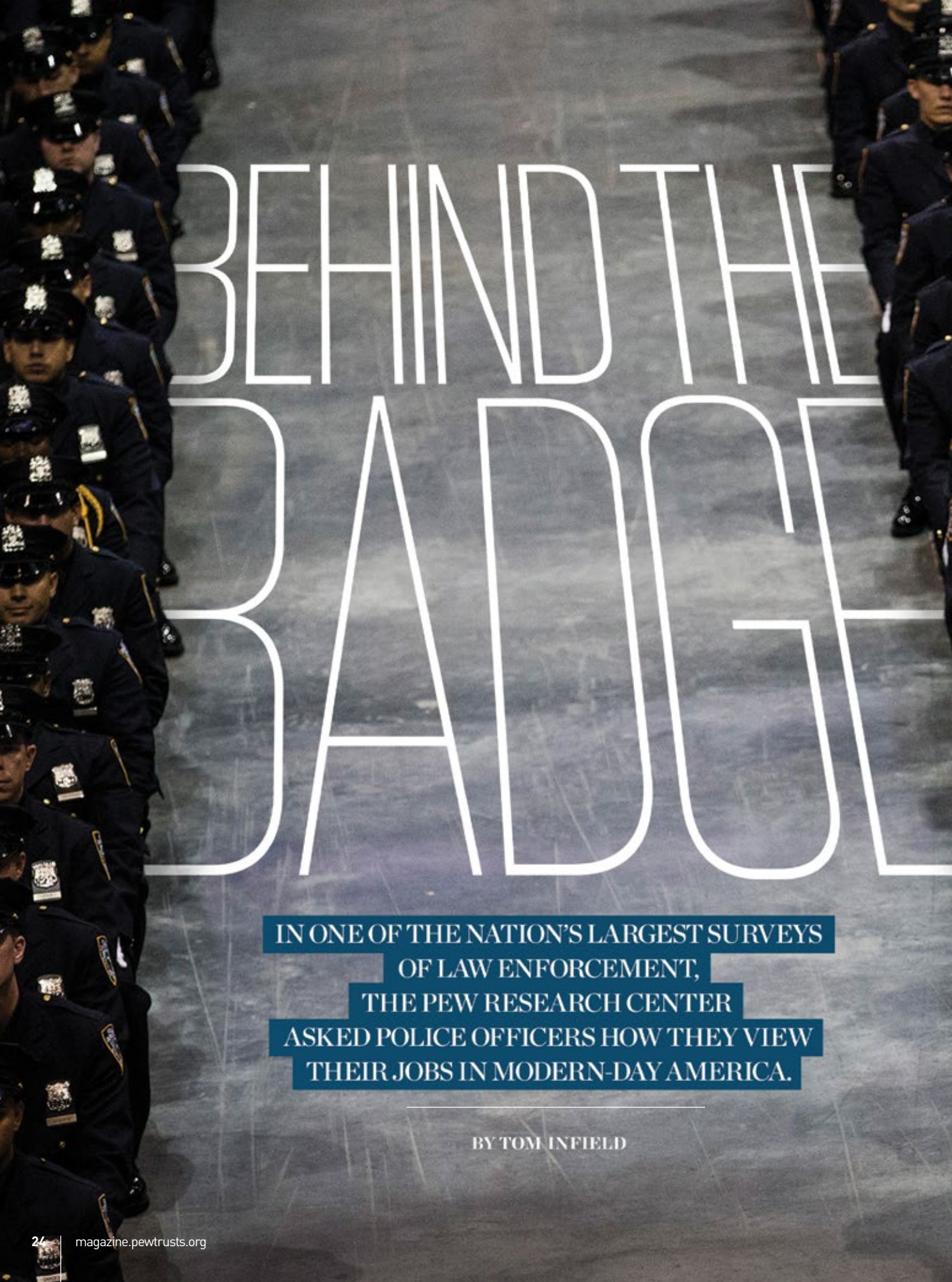
Says his father, Chris, "I didn't realize until Carl become ill how devastating and overwhelming the problem [of antibiotic resistance] really is and how it's getting worse by the day." The couple also has good friends who lost their 24-year-old daughter to a drug-resistant infection—the same day she entered the hospital.

The Romms work to keep their son's memory alive by making sure others know that there are simply not enough types of antibiotics to combat today's bacteria. "Every medical professional that we speak with tells us that they firmly believe that Mother Nature, in the form of bacteria … is coming at us like a freight train, and we are ill-prepared," says Chris. "We're here for Carl, and for others like him, hoping that they won't have to go through this."

Carol Kaufmann is a Trust *staff writer.*

Nevada residents Joyce and Chris Romm visit the nation's capital to draw greater attention to the plight of antibiotic-resistant bacteria. Seven years ago, they lost their son, Carl, a 27-year-old Army veteran, to antibiotic-resistant infections that could not be treated. "I didn't realize until Carl became ill how devastating and overwhelming the problem really is, and how it's getting worse by the day," says Chris. "It's a threat to our national security and to the well-being of humanity."

Evelyn Hockstein for The Pew Charitable Trusts



BEHIND THE BADGE

IN ONE OF THE NATION'S LARGEST SURVEYS OF LAW ENFORCEMENT, THE PEW RESEARCH CENTER ASKED POLICE OFFICERS HOW THEY VIEW THEIR JOBS IN MODERN-DAY AMERICA.

BY TOM INFIELD

Andrew Burton/Getty Images

A large majority of U.S. police officers believe that many of their colleagues have cut back on stopping and questioning suspicious people, according to a Pew Research Center survey that also found officers more worried about their safety and more concerned about using force as a result of high-profile incidents involving African-Americans and the police.

The survey of nearly 8,000 law enforcement officers from police and sheriff's departments with 100 or more members was conducted by the center in mid-2016 in partnership with the National Police Research Platform. The results, published earlier this year, followed a series of officer-involved shootings of African-American suspects that prompted national demonstrations—as well as several attacks on police.

Overall, more than 4 in 5 officers (86 percent) said their work has become harder as the result of incidents in Ferguson, Missouri, and elsewhere in which African-Americans died during encounters with police. The tension between police and the public after these episodes may have played a role in subsequent fatal attacks on officers in Dallas; Baton Rouge, Louisiana; and New York City.

"We found that police were really feeling the impact of all this," says Kim Parker, director of social trends research at the Pew Research Center and one of the authors of the report, *Behind the Badge*.

"I think one of the major contributions we made was to collect these data at a time when there was so much discussion and focus on the relationship between the police and the public," Parker says. "Nobody had been able to collectively interview police in this way and find out how they were feeling."

The report takes into account a similar survey by the center of more than 4,500 American adults. Taken together, the surveys reveal a wide gap between the way officers and the public view the practice of policing in contemporary America.

Christy E. Lopez, a former official in the Justice Department's Civil Rights Division, says the report is required reading for her Georgetown University law students. Lopez, who advised the center's research team, said it provides broad and wide-ranging perspectives on law enforcement that were previously unavailable.

The report identified disparities in the way that white officers and black officers view contact and confrontation with the public, with a higher proportion of white officers, especially white men, saying that other officers were less willing to stop and question suspicious people. "A substantial number of [respondents] are reporting that they are essentially de-policing—that they are doing less to intrude on the public's privacy," says Stephen D. Mastrofski, director of the Center for Justice Leadership and Management at George Mason University, who worked with the Pew Research Center on the report. The implication could be that officers are respecting the rights of citizens more than in the past; alternately, it could mean that some officers aren't fully doing their jobs to fight crime, he says.

"Some people say it is a good thing," Mastrofski says, "and some do not." He says more research is required to determine whether the reluctance to confront citizens perceived by the officers in the survey is borne out by statistics.

Jeff Hadley, chief of public safety in Kalamazoo, Mich., says "there's certainly an argument to be made that officers are much more selective in their enforcement activities."

"The events across the country can sway the mood and temperament and climate of officers and agencies instantaneously," says Hadley, who is also an executive fellow at the Police Foundation, an independent Washington-based professional organization that seeks to improve policing through innovation and science (and the new home of the National Police Research Platform, which assisted in the survey). "When a Dallas

THE SURVEYS REVEAL A WIDE GAP BETWEEN THE WAY OFFICERS AND THE PUBLIC VIEW THE PRACTICE OF POLICING IN CONTEMPORARY AMERICA.

or a Baton Rouge happens, everyone is questioning their own mortality and how they do their work and how they engage folks. And everyone is on edge."

There's no question that police have become more wary, said Frank Straub, director of strategic studies at the Police Foundation and a former law enforcement official in Indiana, New York, and Washington state.

"Officers probably aren't going to come out and say this, but I think the reality in some cases is that officers are fearful of citizens they come into contact with," Straub says. "I think they're fearful if they have to go 'hands on' that it's going to lead to disciplinary issues or charges being proffered against them. I think they are fearful of getting hurt, in all honesty."

On the other side are the often-fearful citizens who get pulled over, he says.

"There is a level of fear among community members, particularly community members of color, that they are going to get hurt during a police encounter if they say or do something wrong that causes a response from the officer," Straub says. "I think it makes these encounters even more difficult—that you have fearful persons engaging with each other. There is heightened risk that the interaction is going to become problematic."

The center's survey data put firm findings behind these experts' impressions—and the disparity between police attitudes and the public's. More than 8 in 10 officers say the public doesn't understand the job they do and the hazards they face. However, a large majority of the public believes it does grasp what police are up against.

The divergences of opinion were apparent on other questions as well. Two-thirds of officers (67 percent) said deaths of African-Americans during encounters with police are isolated incidents. By contrast, 60 percent of the public said incidents such as the one in Ferguson, in which an unarmed 18-year-old black man was killed by police in 2014, are signs of a broader problem.

"Most Americans think these incidents are signs of a broader problem between police and blacks," says Parker.

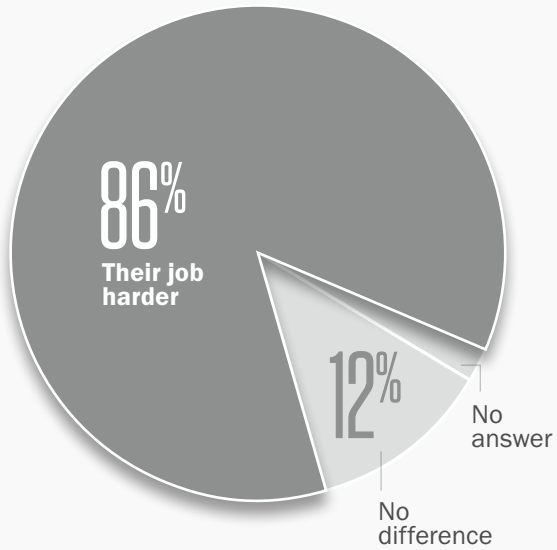
The survey also found differences of opinion along racial lines among officers themselves. When the findings are analyzed by race, the report notes, "an equally striking result snaps into focus: About 7 in 10 white officers (72 percent), but fewer than half of all black officers, see these encounters as isolated incidents."

Officers were also more likely than the public (68 percent to 41 percent) to say that those protesting at demonstrations after officer-involved shootings were greatly motivated by a long-standing bias against police. At the same time, the public was much more likely than police (33 percent to 10 percent) to say the protesters' motivation largely came from a genuine desire to hold officers accountable.

"It might be useful for officers to understand the public perspective, which is that 'we're really out there trying to hold police officers accountable; it's not

Officers say fatal encounters between police and blacks have made policing harder.

Percentage of officers saying high-profile incidents between police and blacks have made...



Note: Less than 0.5% said these incidents have made their job easier.

Percentage of officers saying each has happened in their department as a result of high-profile incidents involving blacks and the police

93%	Officers have become more concerned about their safety
76%	Officers have been more reluctant to use force when it is appropriate
75%	Interactions between police and blacks have become more tense
72%	Officers have become less willing to stop and question people who seem suspicious

Most police officers say fatal encounters between officers and blacks are isolated incidents, while most of the public says they are signs of a broader problem.

Percentage saying the deaths of blacks during encounters with police in recent years are...

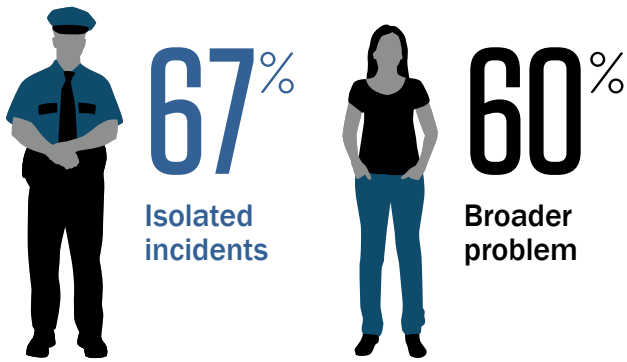


Illustration by Ned Drummond

all about anti-police bias,'" Parker says. "That was a disconnect between the public and the police."

When police and the public were asked about racial progress in America, the race of respondents again made a difference. The majority of the white public (57 percent)—and a much higher share of white police officers (92 percent)—said no more changes are needed to give blacks equal rights. The black public and black officers strongly said the opposite.

Most officers who participated in the survey said they feel that the public respects them and that they had been thanked for their service within the previous month. On the other hand, two-thirds said they had been "verbally abused" in that same period.

Lopez, the former Justice Department official, calls it "the inherent contradiction of police work. Every day they feel frustrated by their job. But also every day they feel proud of their work. That conflict and tension in the officers' view of their work really comes through in the survey."

A majority of police officers said they had become more callous toward people since joining the force. It was young officers, not veterans, who said this most often. And it was young officers who most often took a confrontational approach, who were most likely to report having been verbally abused, and who most often engaged in physical struggles.

These findings could be seen to contradict the notion that young officers come into the profession brimming with idealism, only to have it worn away over time. But the Police Foundation's Straub says it makes sense to him that, with time, officers could increase job satisfaction by learning—from hard experience, perhaps—how to defuse stressful situations.

"The longer you're in the job, the more you learn the value of communication skills," he says. "You realize that you probably don't have to use as much force as you do at the beginning of your career."

In addition to asking officers about their jobs, the researchers probed their opinions on a number of hot-button issues in American society, including marijuana laws, gun control, and undocumented immigrants.

A majority of officers (68 percent) favor easing some legal restrictions on marijuana, though the public is more likely than officers to support legalization for both recreational and medical use (49 percent of all Americans versus 32 percent of officers).

A large majority of both police and the public approve of background checks for gun purchases, not just in stores but at gun shows and in private transactions, the survey found. By lesser—but still substantial—majorities, both groups favor creation of a federal database to track gun sales.

In answer to a question about whether they should take an active role in identifying undocumented immigrants as part of their work, 46 percent of officers said that this should be left mainly to federal authorities.

"It could be that some officers don't want to do it because it could alienate people who are very important to them in doing their everyday work," says George Mason's Mastrofski.

By and large, the survey showed, police feel deeply committed to their jobs.

Hadley, the Kalamazoo chief, said he hoped the findings would help Americans gain a better sense of the challenges that officers face and make it clear that the vast number of them are motivated by public service and a sense of professionalism.

"They do an incredibly difficult job in extraordinary circumstances and in unprecedented times," Hadley says "How many professionals do you know who walk around with a body camera on them to let the whole world judge them? Does a doctor when he's diagnosing a patient? Does a teacher in the classroom?

"I think what the public needs to know, number one," he says, "is that these officers are human beings with all sorts of emotions and fears going on, particularly around their job. There will be some failings along the way because we are all human beings. And that's just the way it is in life."

Journalist Tom Infield last wrote for Trust *about the Pew Philadelphia research initiative's surveys of city residents.*

Pew experts explore innovative ideas on the most critical subjects facing our world.

State Retirement Initiatives Need to Be Coordinated With Existing Benefits

BY JOHN SCOTT AND ALISON SHELTON

More than half of the states have considered or are implementing programs that enroll certain private sector workers in individual retirement accounts funded by automatic payroll deductions—known as auto-IRAs—to help them save for their later years. But as these programs encourage savings, growing IRA accounts could bring unintended consequences as some lower-income workers face asset and income eligibility limits for public benefits programs. That reality could discourage some from participating, though policymakers can act to lessen the possibility that workers would face such situations.

Under auto-IRA programs, employees without a workplace retirement plan are enrolled automatically and contribute a preset percentage of wages or salaries unless they opt out or change the contribution percentage. Workers' accumulated contributions typically are not available until retirement. Although Congress recently repealed clarifying regulations for state auto-IRAs, several states have indicated they plan to proceed with implementation.

Many policymakers anticipate a positive impact on their budgets because retirees who have saved may rely less on public benefit programs. At the same time, programs such as Supplemental Security Income (SSI), the Low Income Housing Energy Assistance Program (LIHEAP), and Temporary Assistance for Needy Families (TANF) often place eligibility limits on participants' assets and income to ensure that these programs are used by those most in need. For example, SSI caps assets at $2,000 for an individual and $3,000 for a couple. In many states, TANF applicants cannot have more than $2,000 in assets.

Participants in these auto-IRA plans could reach such thresholds quickly. A February brief by The Pew Charitable Trusts, *'Secure Choice' Retirement Savings Plans Could Affect Eligibility for Public Benefits*, examined these issues. For example, a single worker earning $15,000 a year and contributing 3 percent of pay to an auto-IRA would accumulate over $2,000 during the fourth year. This could create quandaries for many low-income workers: Should they save but potentially give up public assistance, or avoid saving and just depend on Social Security in retirement?

Some states, including Alabama, Colorado, Illinois, and Maryland, have addressed this interaction between savings and public benefits, choosing to eliminate asset limits on TANF and LIHEAP. On the federal level, Congress in 2008 excluded retirement savings programs—including IRAs, 401(k)s, cash balance plans, and traditional defined benefit plans—from resource tests for the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps.

Governments at both levels have several options:

- Legislators, when authorized by statute, can raise asset limits for specific programs and index them to inflation.
- State legislators can exempt auto-IRA savings accounts from means testing. There are precedents for this: Congress in 2008 excluded individual development accounts and Achieving a Better Life Experience accounts from SSI eligibility calculations, and excluded IRAs when determining SNAP eligibility.
- States also could eliminate asset limits if they have the authority and have not already done so for LIHEAP, SNAP, and TANF. (The Corporation for Enterprise Development has developed a scorecard of state actions.)

Changing asset rules appears to have only limited impact on aid programs. For example, separate research by Pew in 2016 found no statistically significant increase in the number of TANF recipients in states that eliminated asset limits for the program.

Policymakers at the state and federal levels can take several approaches to help ensure that mixed incentives do not discourage low-income workers from participating in auto-IRA programs. Among them are raising or eliminating asset limits or exempting auto-IRA savings from eligibility or benefit calculations for certain aid programs.

John Scott directs and Alison Shelton is a senior researcher in Pew's retirement savings project.

Sharp Partisan Divide on American Institutions

Pew Research Center survey finds Republicans increasingly say colleges—and media—are harmful to the nation

BY CHARLES BABINGTON

A college degree may remain a goal of millions of Americans, but higher education's overall reputation as a positive force in the country has suffered among conservatives.

Nearly 3 in 5 Republicans and Republican-leaning independents (58 percent) now say colleges and universities have a negative impact "on the way things are going in the country." That's a significant increase from last year, when 45 percent held that view, and from two years ago, when only 37 percent did.

Higher education isn't the only place where the left and right diverge: Liberals' and conservatives' views of the national news media are moving in opposite directions. An overwhelming majority of Republicans (and GOP-leaners)—85 percent—say the news media negatively affect the way things are going in the country, while the media's reputation has risen lately in the eyes of Democrats (and Democratic-leaners).

These are among the findings in a new national survey by the Pew Research Center, which adds to a portrait of a nation starkly divided between left and right, with less overlap than in years past.

The survey's most striking findings involve higher education's reputation as either a positive or negative influence on society. In only two years, colleges' and universities' image among Republicans has flipped, going from mostly positive to clearly negative. Two years ago, 54 percent of these adults said colleges had a positive effect on the way things were going (while 37 percent said it was negative). Last year, the division was nearly even (43 percent positive, 45 percent negative). But in the new survey, only 36 percent of Republicans see colleges' impact as positive.

"It's a really dramatic change in a short period of time," says Carroll Doherty, the center's director of political research. The partisan divide over higher education's impact on society, he says, is now almost as dramatic as the long-recognized divide over the news media's role.

In contrast to Republicans, most Democrats (72 percent) say colleges and universities have a positive effect, which is little changed from recent years. Only 19 percent of Democrats say the impact is negative.

Analysts offered a variety of interpretations of the survey results. David Andersen, a political scientist at Iowa State University, says there's "a growing sense of anti-intellectualism and an anti-elite strain within the Republican Party," citing doubt about scientific data on climate change as an example. Samuel Abrams, a politics professor at Sarah Lawrence College, disagrees, saying Republicans are not more anti-intellectual than in previous years and pointing to what he sees as the increasing dominance on campuses of liberal faculty members, students, and ideology. Too many colleges, Abrams says, "have become liberal, intolerant places for ideas."

The findings come from a Pew Research Center survey conducted in mid-June of 2,504 adults that probed partisan views of five major institutions: labor unions; churches and religious organizations; banks and financial institutions; the national news media; and colleges and universities. Pollsters asked whether each of these has a positive or negative effect "on the way things are going in the country."

Democrats remain more likely than Republicans to view labor unions positively, 59 to 33 percent. Larger shares of Republicans have positive views of churches and religious institutions (73 percent of Republicans, 50 percent of Democrats), and of banks and financial institutions (46 percent of Republicans, 33 percent of Democrats).

Here's a more detailed look at the findings.

Colleges and universities

The shift in survey results this year marks the first time since the center began asking the question in 2010 that most Republicans say colleges and universities have a negative impact on events in America—a sentiment even more pronounced among strong conservatives.

Since 2015, positive views of colleges' and universities' impact on the country have fallen 11 percentage points among Republicans with at least

a college degree (from 44 to 33 percent). The drop was more dramatic among Republicans without a college degree, whose positive views of colleges' and universities' impact on the country have dropped 20 points (from 57 to 37 percent).

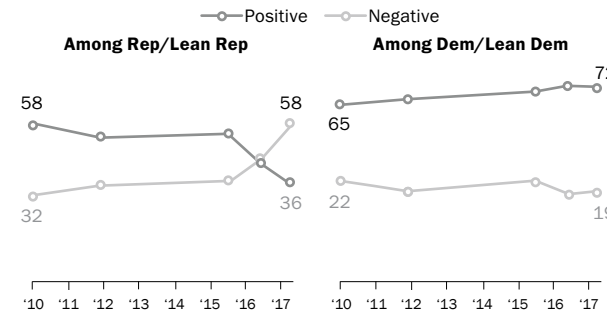
And perhaps counterintuitively, Republicans with higher incomes (which often correlate with more education) are less likely to see colleges and universities as a plus for society. Only 31 percent of Republicans in households earning at least $75,000 annually say colleges have a positive impact on the way things are going, compared with 46 percent of those in households earning less than $30,000.

That's not to say Republicans don't see a college degree as an asset. In a 2016 survey by the center, most Republicans said colleges help prepare people for good jobs. Moreover, most Republican college graduates—like their Democratic counterparts—said their own college experience was valuable for developing workplace skills.

Younger Republicans continue to express more positive views of colleges than do older Republicans. But the share of Republicans under age 50 who view colleges positively has fallen 21 points since 2015 (from 65 to 44 percent) while declining 15 points among those 50 and older (43 to 28 percent.)

Since 2015, Republicans' views of the impact of colleges have turned much more negative.

Percentage who say colleges and universities have a _____ effect on the way things are going in the country



Source: The Pew Research Center
Note: "Don't know" responses not shown.

National news media

Only 10 percent of Republicans and GOP-leaners say the news media have a positive effect on the country. Meanwhile, the share of Democrats holding a positive view of the news media's impact has increased 11 percentage points since August 2016. Doherty calls it the biggest shift since Pew began polling on this question.

Still, about as many Democrats say the news media have a positive impact on the country (44 percent) as say there is a negative impact (46 percent).

Churches and religious organizations

Public views of the impact of churches and religious organizations on the country have changed little in recent years. Most Americans (59 percent) say these institutions have a positive impact. This includes 73 percent of Republicans and 50 percent of Democrats.

Liberal Democrats are about evenly divided on the question: 44 percent negative, 40 percent positive. By big margins, however (58 percent positive, 29 percent negative), conservative and moderate Democrats see churches as a social good.

Banks and other financial institutions

Among U.S. adults, more view the impact of banks and other financial institutions negatively (46 percent) than positively (39 percent). But positive views are considerably higher among Republicans.

By 46 to 37 percent, more Republicans say banks and financial institutions have a positive rather than negative effect on the country. Positive Republican views are up 7 percentage points since 2016. This is the first time in surveys dating to 2010 that GOP views of the impact of financial institutions have been more positive than negative.

Labor unions

Nearly half of American adults (47 percent) say labor unions have a positive impact; about a third view them negatively. While support is stronger among Democrats, positive views among Republicans are up 6 percentage points since 2016 and are above lows reached in 2010, in the economic recession's wake.

Among Democrats, those with less education are less likely to see unions' impact as positive. Only about half of Democrats with no more than a high school diploma (53 percent) say labor unions have a positive effect on the country, in contrast with 66 percent of Democrats with postgraduate degrees.

By contrast, Republicans with less education are more likely than those with higher levels of educational attainment to see unions' impact as positive.

Charles Babington, a Washington-based journalist, wrote about U.S. families' financial mobility in the Summer 2017 issue of Trust.

Stateline, an initiative of The Pew Charitable Trusts, is a team of veteran journalists who report and analyze trends in state policy with a focus on fiscal and economic issues, health care, demographics, and the business of government. More stories are available at pewtrusts.org/stateline.

While Most Small Towns Languish, Some Flourish

BY TIM HENDERSON

By now, the demise of the American small town is a common tale. But even as most of them continue to lose residents, a few are adding them at a rapid clip.

In several Western and Southern states, small towns are expanding quickly as fast-growing metro areas swallow up more outlying towns, according to a *Stateline* analysis of census estimates.

Between 2015 and 2016, the growth was particularly strong in small towns in Utah, Colorado, Washington, Oregon, Florida, Idaho, Delaware, Texas, Arizona, North Carolina, and South Carolina, where small towns grew around 1 percent or more.

During the same period, 54 percent of small towns across the U.S. lost population, and most others saw only limited growth. (For purposes of the analysis, *Stateline* defined "small towns" as those having fewer than 10,000 residents, a common standard.)

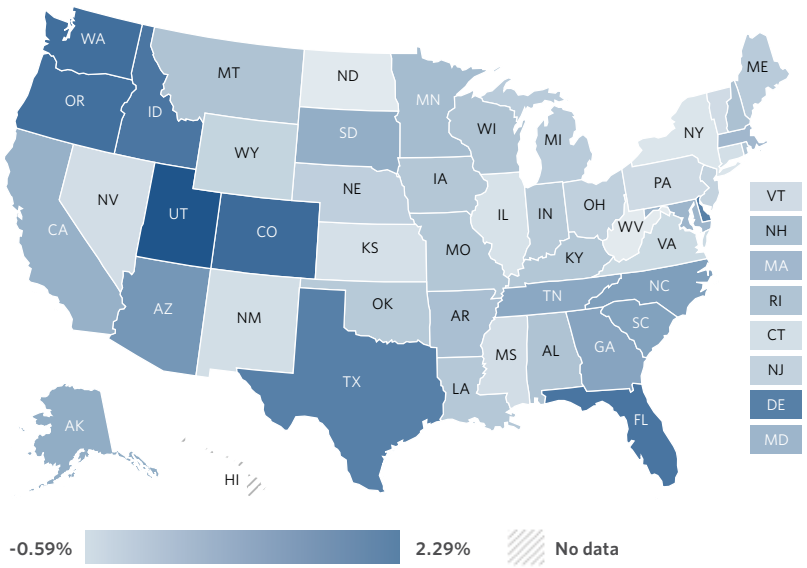
The analysis shows there's no single way of looking at the fate of small-town America, said Brookings Institution demographer William Frey. "It seems to be tied to the economic and demographic success, or lack thereof, of the larger region," he said.

The reasons for growth can be varied, according to Frey and other demographers. Jobs in booming cities can draw new residents to nearby small towns, where quiet streets and good schools can be especially appealing to millennials ready to raise children. In some states, urban gentrification has pushed the poor and immigrants further into outlying towns, where housing is less expensive.

The growth may portend a renewed interest in faraway suburbs, which was tamped down during the recession, Frey said.

"The more successful parts of the country may be poised to experience a renewed 'exurbanization' as the economy picks up," Frey said, referring to people who choose to live in rural areas while commuting into the city for work. The trend could lead to continued growth of small towns in states like Colorado, Oregon, and Utah.

Small-Town Population Percentage Change



Source: Stateline analysis of U.S. Census Bureau estimates.

Small towns shine

Some of the fastest-growing small towns are being swallowed up by surrounding metro areas. Among them: the former farming community of Vineyard, Utah, where a massive housing and retail development fed by new highways has pushed the population from 139 in 2010 to almost 4,000 last year.

Vineyard is part of a rapidly growing area between Provo and Salt Lake City that demographer Pamela Perlich of the University of Utah compared to "twin cities" like Dallas and Fort Worth in Texas.

"The area between those two is the most rapidly growing in a rapidly growing state," Perlich said.

Utah County, which includes Provo and Vineyard, gained jobs at the highest rate—about 5 percent—of any large county in the nation last year, according to Bureau of Labor Statistics data. The area around Salt Lake City has earned the nickname "Silicon Slopes" for its combination of high-tech enterprises, including the nearby National Security Agency Utah Data Center, and ski resorts a short plane ride from California's Silicon Valley.

Washington state, where the small-town population grew by almost 2 percent last year, trailing only Utah and Colorado, has seen more of its residents moving to outlying areas as a tech boom has driven up housing prices near Seattle.

"I would love to tell you that people love the quieter small-town lifestyle," said Mayor Daryl Eidinger of Edgewood, a town 27 miles south of Seattle whose population grew 9 percent last year, from 9,810 to 10,734. "But I attribute our growth to the high cost of housing to the north of us, in Seattle," Eidinger said, adding that he expects another 10 percent growth to be recorded this year. "It will never be as quiet as it was 20 years ago," he added.

In some areas, gentrification is leading to a new small-town life for those seeking affordability and diversity.

Lincolnville, South Carolina, was founded after the Civil War by freed slaves looking for a respite from racial discrimination in nearby Charleston. Today it is now about half white and 40 percent black.

The town's population grew by 700 last year, to 1,971, mostly because its borders expanded to include an apartment building with 320 units, Mayor Charles Duberry said. But it was growing before that, by about 6 percent between 2010 and 2015, as more people who grew up there bought land and built their own houses.

"When people come here they feel welcome, and that makes a big difference," Duberry said. Many residents, including Duberry, work in local shipyards.

Partly because of the growth, the town is planning to bring back its local police department, which disbanded in 2012.

The small-town population in Texas grew by 30,791 last year, the biggest increase of any state. As in Utah, many of those small towns are "in the path of economic growth" near expanding cities, said Lloyd Potter, Texas' state demographer.

"Those small towns are in the midst of fairly dramatic economic and population growth because they're close to areas where a lot of jobs are being created," said Potter.

The fastest-growing small town in Texas is Fulshear, outside Houston, which has been growing by more than 1,000 residents annually since 2013 and now has almost 8,000 residents. The population of Dripping Springs, west of Austin, grew 26 percent last year, to 3,140.

But some northwestern parts of the state have generally been left out, with some small towns shrinking as aging residents move toward cities where their children now live, Potter said.

Scenic beauty

Small-town population shrank in 16 states, with Illinois, New York, and Pennsylvania each shedding more than 10,000 small-town residents. Small towns in New York lost 16,903 residents, making it the state with the largest decline.

Since 2010, the number of rural areas, including small towns, in the eastern U.S. that are shrinking has increased dramatically, said John Cromartie, a geographer for the U.S. Department of Agriculture who tracks changes in rural areas.

Some small towns in New York are bucking the trend and growing—either because they're drawing affluent millennial commuters ready to have children in a leafy suburb, or because new immigrants and other low-skilled workers are fleeing gentrification, said E.J. McMahon, research director for the Empire Center for Public Policy in New York.

Both groups accept longer commutes as the price of more affordable housing and better schools, said McMahon, who has written about recent declines in upstate rural population.

Some areas known for scenic beauty and recreation are also doing well, Cromartie said. He pointed to Waterford, New York, south of Saratoga Springs, which was the fastest-growing small town in New York last year, up 6 percent to 2,167 residents.

Scenic destinations like the Saratoga area were hit hard by the housing crisis and recession but showed a lot of improvement nationwide between 2015 and 2016, Cromartie said.

But even natural beauty is no guarantee of small-town success. Maurice River Township, New Jersey, has the Delaware Bay and its namesake river, but the town's population has shrunk to less than 6,600 in 2016, down 7 percent from 2015 and 18 percent from 2010.

The town adopted an ordinance in April requiring owners of vacant houses to register and pay an escalating annual fee, which Mayor Patricia Gross said would cover some of the costs of decreased property values and extra maintenance.

Tim Henderson is a staff writer for Stateline.

Penguins as Far as the Eye Can See

On a voyage to the sub-Antarctic, a Pew staffer finds an ecosystem in need of protection.

BY JOHNNY BRIGGS

On our third day at sea, I can tell from a look at the water that we are nearing land. As the 256-foot U.K. patrol vessel Pharos SG rolls over the blue expanse hundreds of miles southeast of the Falkland Islands, the sea begins to bubble with wildlife, and soon we are surrounded by a spectacle of fur seals and penguins—a sign that we're close to our destination, South Georgia Island.

Remote and windswept, South Georgia and the South Sandwich Islands, which together are a U.K. sub-Antarctic territory, harbor biodiversity and a cultural history worthy of protection. I am representing the Pew Bertarelli Ocean Legacy Project on a 12-day expedition to learn more about the history of the islands, information that could help with decisions on how to conserve them. Also on board are representatives from the Royal Society for the Protection of Birds, WWF-UK, the BBC, the British Antarctic Survey, the U.K. Foreign & Commonwealth Office, and the Australian, Norwegian, and South Georgian governments.

The islands, in the South Atlantic Ocean east of Drake's Passage between Antarctica and Argentina, are home to an amazing number of penguins and one of the world's most populous and diverse seabird communities. In its heyday in the 1800s and early 1900s, the area was a major sealing and whaling center.

Landfall, and glimpse into a brutal past

Our first stop on this February trip is King Edward Point on the east coast of South Georgia. It is a barren landscape, devoid of flora—but teeming with seals and penguins. A steep mountain towers above a huddle of red- and green-roofed buildings that serve as the King Edward Point Research Station, owned by the islands' government and operated by the British Antarctic Survey. The government officials, survey staff, and visiting scientists working here manage the South Georgia fishing and tourism sectors, and support critical scientific research for ecosystem management.

The first recorded sighting of these islands was in 1675, from a merchant ship that had been blown off course while rounding Cape Horn. The first landing here occurred a century later, when British explorer Capt. James Cook took possession of South Georgia in the name of King George III.

The first sealer arrived on South Georgia in 1788, and by 1825 1.2 million fur seals had been killed for their pelts. The fur sealing industry ended in 1912 with the species almost abolished from the island.

In 1904, a Norwegian named C.A. Larsen set up the first Antarctic whaling station on the island at Grytviken with 60 men. Additional stations were established at Ocean Harbour, Husvik, Stromness, Leith Harbour, and Prince Olav Harbour. Whales were plentiful, and their oil was in high demand for use in lamp fuel, margarine, soap, fertilizer, and feed for livestock. Coincidentally, many similar products are made today from krill, a tiny crustacean that underpins the Southern Ocean food web, that itself is now under threat.

The unsustainability of whaling in South Georgia was apparent from the outset. In 1906 the governor of the Falkland Islands, which oversaw industry on South Georgia, attempted to manage the resource—with restrictions that forbid the killing of females with calves.

The advent of the pelagic factory ship, however, which allowed whalers to operate on the high seas, ultimately signaled the end of the industry. Catch skyrocketed, leading to an overproduction of oil and a price crash, which forced two of South Georgia's whaling stations to close. Whaling limped along on

Thousands of king penguins on the Salisbury Plain on South Georgia Island. *Johnny Briggs/The Pew Charitable Trusts*

South Georgia until 1965, when the animals' population sunk too low for the industry to make a profit.

Most of South Georgia's whaling stations have fallen into disrepair, but Grytviken remains. The clean-up of the site, done so that tourists can safely visit it, has left a stripped-back, sanitized version of the station, but the scale and efficiency of the bygone operation remain apparent.

Workers at Grytviken could process up to 25 60-foot whales a day. Today, huge rusting vats still drip whale oil, and a wooden pole in the ground shows the size of the largest blue whale ever recorded, which was processed on the site and measured 112 feet and weighed more than 100 tons. Between 1904 and 1965, South Georgia stations processed 175,250 whales.

As some species rebound, new threats loom

Those visitors are also witnessing an ecosystem in recovery. It is estimated that the sealing industry decimated South Georgia's Antarctic fur seal population to less than 100 animals, yet today the fur seals of South Georgia are the densest aggregation of marine mammals on Earth, totaling over 4 million. Whales are returning in significant numbers, and some bird and plant species are thriving in part due to programs to eradicate invasive reindeer and rats.

Despite these promising signs, the ecosystem faces increasing threats from climate change: Glaciers on the islands are retreating at a rate of up to 1 meter (3.3 feet) per day, and water temperatures and acidity levels in the Southern Ocean are increasing faster than anywhere else on the planet, imperiling numerous species.

The government of South Georgia and the South Sandwich Islands is implementing precautionary measures to protect the area's remarkable biodiversity.

Baby elephant seals lie among crowds of king penguins on South Georgia Island. *Ondrej Zaruba*

Inquisitive penguins

As I step from a rubber Zodiac onto the shore of Salisbury Plain, on South Georgia, hundreds of thousands of king penguins coo as they feed and mingle on this windswept island near the bottom of the Earth.

South Georgia and the South Sandwich Islands are home to one-quarter of the world's penguins, as well as tens of millions of breeding pairs of other seabirds. Scientists say that climate change could affect the availability of food for many of these animals—for example, by forcing the migration of prey species—or could accelerate the evolution of new diseases that threaten native wildlife.

For now, the penguins are staying put. On shore, the muddy horde stretches the horizon, a black, white, and yellow mosaic broken only occasionally by skuas and petrels: seabirds hoping to scavenge a dead or weak juvenile penguin. The ones we encounter are inquisitive, circling our boat to check us out.

Next, we visit a colony of macaroni penguins on the steep slopes of Willis Island. South Georgia is home to an estimated 1 million pairs of these yellow head-dressed birds, their name inspired by the outlandish dress of highly fashionable "macaroni men" in 18th-century London. They are the most abundant penguin species on the island, although their numbers have fallen by half over the past 30 years.

Up close with rare birds

One of our final stops before returning to the Falklands is Bird Island, which is just shy of 2 miles long and lies off the northern tip of South Georgia. The islet holds some of the highest concentrations of wildlife in the world, with a bird or seal every 5 square feet on average. The British Antarctic Survey operates a research station here, where a staff of four tracks seabird and seal populations.

Two of those scientists guide us up a grassy bank to a wind-buffeted hilltop. We are serenaded by the song of the South Georgia pipit—the world's most southerly songbird and a bird found only on South Georgia. As we crest the summit, we see a remarkable sight: wandering albatrosses on the nest.

The wandering albatross has the largest wingspan of any living bird—up to 11 feet 6 inches—and can live for 50 years. Some circumnavigate the Southern Ocean three times a year, covering more than 75,000 miles.

South Georgia is a critical breeding site, home to 12 percent of the global breeding population of black-browed and wandering albatrosses and 40 percent of the global breeding population of grey-headed albatrosses. Yet since 2006, populations of those three species have fallen by 18, 19, and 43 percent, respectively. Researchers believe this is due to birds being caught on fishing lines far beyond South Georgia's waters. On Bird Island, individual birds are tagged and monitored, but the fate of the species may ultimately hinge on fishing bycatch prevention measures thousands of miles away.

An uncertain future

For now, there is hope for this ecosystem and the species that depend on it. In 2012, South Georgia and the South Sandwich Islands established a marine protected area covering the entire maritime zone of the overseas territory, 413,129 square miles. Restrictions within the protected area ensure that the government is taking precautionary steps to manage the environment, and officials go to great lengths to sustainably manage tourism to South Georgia.

It is clear, however, that the enhanced management of tourism and fisheries over the coming years will be imperative if the U.K. is to keep South Georgia on the road to recovery. Krill, the crustacean which underpins the health of the entire ecosystem, is under stress from melting ice and warmer and more acidic waters.

The government is set to review the marine protected area in 2018 and has the opportunity to enhance conservation measures throughout the waters of South Georgia and the South Sandwich Islands. Doing so would offer this place its best chance for a thriving future—for the species that live here and the tourism industry that depends on them.

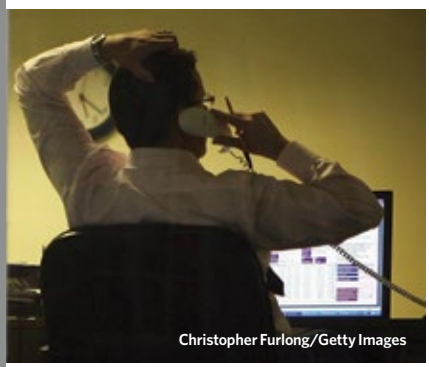
As we steam away from these wild and foreboding islands, I stare anew at the boisterous animals stirring up the water. The fate of these species, like so many others, ultimately hinges on how governments steward Earth's natural resources. We have the data, we have the power, and these animals—knowingly or not—are counting on us.

Johnny Briggs is a London-based staff member of the Pew Bertarelli Ocean Legacy Project.

Online or On the Phone Makes Little Difference

Study finds minimal effect on Americans' answers to survey questions about their news consumption habits.

BY ELISA SHEARER


Christopher Furlong/Getty Images

When asked about their news consumption habits and their views of the media in general, Americans give similar answers regardless of whether they are surveyed by phone or online, according to a Pew Research Center analysis of new data from a 2017 study and findings from a 2014 survey. Just one question with very general response options—how much people followed news—did not follow this pattern, yielding a noticeably higher news consumption estimate in phone surveys than web surveys.

The new analysis sheds light on concerns raised among pollsters that the medium by which a survey question is asked—its mode—can affect responses. (In this case, a telephone survey with an interviewer was compared with a self-administered survey on the web.) Under a phenomenon known as "social desirability bias," some respondents might be inclined to give more honest answers online than they would on the phone because online surveys do not involve a human interviewer and therefore are inherently more private.

For example, respondents in the center's 2014 survey were more likely to say they were "very satisfied" with their lives when interviewed on the phone than online. Questions about news consumption might similarly be at risk of this mode effect if respondents believe that their responses about media habits would portray them in a more positive light to an interviewer.

A set of comparisons across seven different media questions, however, shows little if any of this sort of mode effect on six specific items. On questions about how much Americans enjoy keeping up with the news, how in touch they feel journalists are with the public, whether they have ever stopped talking to someone over political news, and whether they recently got news from the newspaper, TV, or radio, the center's analysis found no mode differences.

On a more general question, though, there was a difference between the two modes. When asked how much they followed the news, 63 percent of U.S. adults who were interviewed on the phone said "all or most of the time." When asked the same question on the web, the number dropped to 49 percent.

The difference is especially strong among black U.S. adults: 66 percent said they follow news most of the time when asked on the phone, versus just 34 percent who answered this way on the web—a difference of 32 percentage points. By contrast, the difference among whites was just 11 points (65 percent on the phone versus 54 percent on the web).

Mode also generally had a more pronounced effect on the responses from Democrats than on the responses from Republicans. Democrats, including independents who lean Democratic, were 17 points more likely to say that they followed news when asked on the phone (66 percent) than on the web (49 percent). Among Republicans and Republican leaners, by comparison, there was just a 7-point gap between those who were asked about their news habits on the phone (59 percent) and the web (52 percent).

The Pew Research Center and other organizations have long asked how the presence or lack of an interviewer affects a broad range of survey questions. In the case of questions about news and media, the absence of mode effect on more specific questions —such as whether respondents got news from a newspaper "yesterday"—suggests that it may help to ask respondents to think more precisely about their news habits.

Elisa Shearer is a research analyst at the Pew Research Center.

Time to Take a Close Look at How Federal Policies Affect States

BY INGRID SCHROEDER

In May, House Speaker Paul Ryan and Minority Leader Nancy Pelosi announced the creation of the Speaker's Task Force on Intergovernmental Affairs, "a bipartisan group of lawmakers focused on balancing the interests of federal, state, tribal, and local governments." The announcement didn't get much attention amid the steady stream of news coming out of Washington, but it could have implications for the effectiveness of government in the United States.

The federal and state governments play key roles in shaping nearly every area of domestic policy, from health care to education to transportation. But despite the intertwined nature of federal and state policymaking, few institutions facilitate interaction and consultation among decision-makers across the two levels of government. The creation of this task force is a step in the right direction toward expanding intergovernmental dialogue.

One area the task force might help to highlight is the strong connection between federal and state finances. Nearly $1 of every $3 in state revenue in 2015 came from federal grants, according to the latest available data. In addition, state tax codes are often linked to policies in the federal code such as deductions, income exclusions, and credits, so any changes to the federal code can affect state tax policies and increase or decrease state revenue.

Consequently, the current debates in Washington focusing on the federal budget and health care reform, among other areas, could have implications far beyond the Beltway, increasing the need for decision-makers at all levels to understand these federal-state linkages. As a recent analysis from The Pew Charitable Trusts highlights, of the more than $145 billion in total discretionary federal grants provided in fiscal year 2016, at least 9.1 percent was proposed for elimination in the fiscal 2018 budget blueprint released by President Donald Trump in March. Most of the funding recommended for elimination is associated with grants to state and local governments.

In addition, Pew noted that some federal tax reform proposals include changes to the standard deduction and personal exemption, which could affect not only federal revenue but also revenue in states that incorporate these provisions into their tax calculations—potentially changing the federal and state taxes paid by individual filers.

Unfortunately, the increasing need to understand the evolving relationship between the federal and state governments coincides with a reduced capacity to do so. Government institutions that once reviewed federal-state issues have been disbanded or given other priorities. For example, the Advisory Commission on Intergovernmental Relations, along with units that focused on intergovernmental relations in the Office of Management and Budget and the Government Accountability Office, ended in the 1980s and 1990s. The House and Senate intergovernmental relations subcommittees have been given other substantial responsibilities. And in 2012, the Census Bureau decided to discontinue publishing a significant source of data for federal-state fiscal information.

The decline in national capacity for data-gathering and analysis makes it more difficult for policymakers to take into account the full impact of federal decisions on the American people, not just the fiscal impact on a particular level of government. When decisions are made without adequate data and discussion, there is a significant risk that the problem being addressed will go unsolved—or simply passed on to other levels of government.

The House's new task force represents a new opportunity to begin to address this risk. Its mission calls for federal policymakers to create partnerships that consider the interests of all levels of government and to provide a forum for state and local governments to showcase their responses to pressing policy challenges.

The task force is still in its infancy, and it remains to be seen how active and successful the effort will be in promoting cooperative governance. But the initiative deserves a close look as policymakers and the public strive to understand how the wave of proposed policy changes circulating in Washington might play out across the country.

Ingrid Schroeder directs Pew's fiscal federalism initiative.
A version of this article originally appeared online in The Hill *on July 25, 2017.*

The Smart Way to Get Tough on Crime

For decades, state prison populations skyrocketed because of laws and policies that put more offenders behind bars for longer periods of time. But that's been changing, thanks to data-proven strategies that protect public safety and provide a better return on taxpayer dollars than building new prisons. Since 2006, Pew and its partners have worked with 36 states to help them analyze their sentencing and corrections systems and develop such strategies. Adam Gelb, who directs Pew's public safety performance project, talked with Trust *about the latest effort in Louisiana.*

Louisiana has long been the most incarcerated state in the nation, but that will likely change after the comprehensive reforms adopted this year. How did that come about?

There were several key factors, but probably the most critical was that state leaders in all three branches decided it was time to shed that title, especially when it became clear that incarceration was costing taxpayers hundreds of millions a year but not translating into safer streets. Governor John Bel Edwards was particularly determined, and he and others were inspired by the successes of neighboring states, including Texas and Mississippi, which had shown it was possible to reduce crime and incarceration at the same time.

Other important ingredients included a strong push for reform by a range of advocates, from business and faith leaders to formerly incarcerated persons to representatives of communities impacted by crime and incarceration. Pew acted like the glue between all of these stakeholders, bringing them together around the data, facilitating consensus on a comprehensive set of policy recommendations, and then coordinating the effort to get 10 bills across the finish line in the Legislature.

In Louisiana the governor is a Democrat and the Legislature is Republican. Talk about why there is such bipartisan support for sentencing and corrections policy reform.

Louisiana's reform package not only passed with strong bipartisan majorities—it ended up being one of the few issues not derailed by polarized politics in the 2017 legislative session. It's quite remarkable. Crime and punishment used to be one of the most divisive topics in American politics. Today, it is fertile ground for bipartisan agreement and cooperation.

One reason is that crime has been coming down since a peak in the early 1990s. That lowered the temperature of the issue and cleared space for discussions based on research and data about what actually works best to keep communities safe.

But it took more than that. It took conservatives realizing that prisons are a government program, and just like any other government program, they deserve scrutiny and skepticism. Progressives, on the other hand, began to define the scale of incarceration as a central civil rights concern and the challenge of addiction as a matter of public health rather than criminal justice.

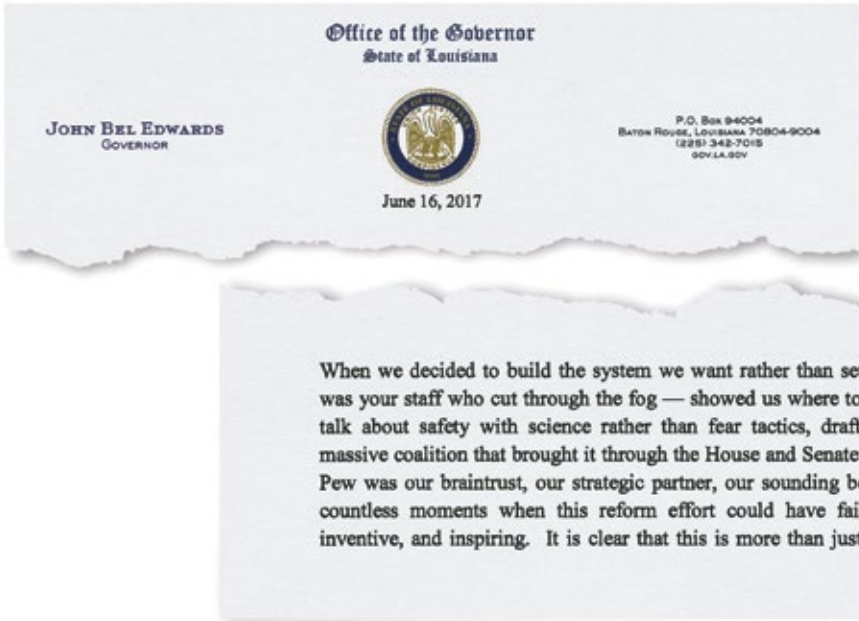
When you stitch all of that together—nationally and in states like Louisiana—you get a consensus around policies that do three things: focus prisons on those who have been convicted of the most serious offenses, steer lower-level offenders into prison alternatives, and reinvest savings in programs that cost less and are better at reducing reoffending.

So how does Pew help?

Crime and justice are often emotional topics. When we work with legislators and practitioners in a state, our primary value-add is objectivity. We take what's usually a loaded subject matter and strip it down to facts: Who's entering the state's prison system? How long are they staying? How have those trends changed over time? We put the focus squarely on data.

What we found in Louisiana, for example, was that more than half of the people sent to prison each year hadn't been convicted of new crimes but had broken the rules of their probation or parole. People also went to prison for drug, property, and other nonviolent crimes at twice the rate of South Carolina and nearly three times the rate of Florida—despite all three states having nearly identical crime rates.

These data findings were critical for the discussions of the Louisiana Justice Reinvestment Task Force, a group that state leaders created to develop reforms and invited Pew to assist. The data and research anchored the policy discussion and created a shared vocabulary for people who don't always see eye to eye.



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June 16, 2017

When we decided to build the system we want rather than settle for the system we've built, it was your staff who cut through the fog — showed us where to begin, gave us the vocabulary to talk about safety with science rather than fear tactics, drafted the legislation, and built the massive coalition that brought it through the House and Senate and to my desk for my signature. Pew was our braintrust, our strategic partner, our sounding board, and our truth teller. In the countless moments when this reform effort could have failed, your staff was courageous, inventive, and inspiring. It is clear that this is more than just a job for them.

An excerpt from a letter from Louisiana Governor John Bel Edwards thanking Pew for its assistance on corrections reform legislation.

So it sounds like each state needs tailor-made reforms to address specific needs.

Exactly. The research about what works in sentencing and corrections, what works to reduce recidivism, is common across the country. But each state's criminal justice system and sentencing structure is unique and requires its own examination.

In Louisiana, one notable issue was the financial debt faced by many people returning home from prison. Felony convictions were generally accompanied by thousands of dollars in fines and fees, which made it harder for those reentering the community to support themselves and their families. The Louisiana reform package addressed that by requiring courts to determine a person's ability to pay, creating standards for payment plans that hold people accountable, and rewarding people who make consistent payments with a debt-forgiveness incentive.

These reforms often mean states can save money by not building new prisons. What happens to those resources?

The Urban Institute has documented more than $4 billion in total prison savings since 2010, and most of that is from prisons that didn't have to be built or staffed due to reforms. Some states have reduced their prison populations enough to close existing prisons. Texas has closed four and plans to shutter four more. South Carolina has closed six.

As states avert prison growth or reduce populations, they are shifting resources into evidence-backed alternatives. Think of it as a rebalancing of the state's public safety investment portfolio that expands the options available to judges and probation officers and helps improve individual safety for those who have been victimized.

Georgia, for instance, has directed over $56 million toward drug and mental health "accountability courts" and other public safety strategies. Oregon has sent nearly $100 million to counties to fund local crime-fighting programs and victim services.

Pew began its work in corrections a decade ago, so there's been time to see how well it has been working. How are these efforts evaluated and what's the verdict?

I don't know that we can say there's a "verdict" yet. The criminal justice system is a complex and fragmented ecosystem, and there are numerous local and national reform efforts across the country.

When you combine all of the activity and the trends that may have had nothing to do with all of that activity, what we can say is this: Instead of growing by at least 13 percent—which is what states were projecting in 2006—the nation's prison population has dropped by 5 percent. States saved or avoided billions in prison expenditures and reinvested hundreds of millions into programs that work better and cost less.

Most importantly, crime rates have continued to fall. Sentencing and corrections reforms aren't intended to reduce crime, but the fact that both crime and incarceration have been falling in tandem since 2008 has shown that such reforms, if they are crafted carefully and implemented well, can be achieved without jeopardizing public safety. In fact, over the past five years, crime has actually dropped more in states that reduced their imprisonment rates than it did where prisons continued to grow.

Beyond that, we have seen a real shift in the national dialog about criminal justice policy. It used to be about who is "tough" versus "soft" on crime. Now, governors and legislative leaders from both parties are focusing on a much more productive question: How do we squeeze as much public safety as possible out of our corrections system?

Partnering With Pew to Maximize Charitable Giving

Donor-advised funds let philanthropists focus on their passion, while tapping Pew's data-driven approach to spurring change.

BY DEMETRA APOSPOROS


Science Source

The rise of antibiotic-resistant bacteria poses a major global public health threat. Particularly bedeviling are drug-resistant bacteria that are Gram-negative, which can cause pneumonia, meningitis, and surgical and bloodstream infections. Finding drugs to fight these superbugs has proven challenging. As reported in the August issue of the journal *Nature Medicine*, "despite several efforts at development, no new class of antibiotics for Gram-negative bacteria has reached the market in more than three decades."

Among the major reasons are the bacteria's built-in, tricky defense mechanisms, including a double membrane, that make it difficult for a drug to break through them. But another reason scientists have not been able to find antibiotics to take on these bacteria has been a lack of coordinated data sharing by researchers. The *Nature Medicine* article says that future research efforts may get a boost, though, from a new database recently launched by The Pew Charitable Trusts "to collect published research and data on the double-membrane problem, in hope of facilitating drug development."

That internet-based database is the Shared Platform for Antibiotic Research and Knowledge, or SPARK. It was created to let scientists leapfrog research stumbling blocks by seeing how others have conquered similar obstacles, to create more collaboration among researchers, and to allow them to readily build off one another's work—all with the hope of kick-starting new discoveries. SPARK is supported by the Kathryn W. Davis Peace by Pieces Fund, a donor-advised fund at Pew that invests in a broad range of issues, including public health, sustainability, and the environment.

"Donor-advised funds allow philanthropists to guide their giving to the issues that matter most to them, with a trusted partner to provide philanthropic expertise and management support," says Sally O'Brien, Pew's senior vice president of philanthropic partnerships. "Pew handles all administrative tasks, while the donor is able to leverage our seven decades of experience in philanthropic investing."

Donor-advised funds have become increasingly popular in recent years, and Pew has managed several. Donors are able to remain deeply involved, much as they would if they created their own private foundation. But Pew takes care of the day-to-day administration, supervising the vetting and monitoring of grantees, providing complete grants management, overseeing the investment of fund assets, and filing the required business and tax forms. Drawing on its

Above: At the Stone Barns Center for Food and Agriculture in Pocantico Hills, New York, farm director Jack Algiere demonstrates sustainable agriculture techniques to a group of young farmers attending a conference. Left: The cone-shaped *Klebsiella pneumoniae* bacteria is Gram-negative and resistant to some antibiotics, making the infections it causes—like pneumonia and meningitis—difficult to treat.

own history as a grant-making institution, Pew also has experience in strategic planning and evaluation.

That's the case with the Peace by Pieces Fund, which Pew administers. Advised by one of Kathryn W. Davis' grandchildren, the fund supports a number of organizations both large and small—among them, the Stone Barns Center for Food and Agriculture, which promotes sustainable and community-supported agriculture and local markets. Located in New York's Hudson River Valley, Stone Barns focuses on training farmers to use resilient and restorative farming techniques, increasing public awareness of the benefits of seasonal and sustainable foods, and educating children about the sources of their meat and produce.

Pew's nearly 70 years of developing creative ideas and taking calculated risks to improve lives and inform thepublic is often the catalyst for philanthropists to move from seeking Pew's advice to establishing a more formal relationship through a donor-advised fund, says O'Brien.

"Whether a donor is an emerging philanthropist who wants to move to a new level of giving or a longtime funder who desires a different strategy around their investments, Pew is committed to transforming their aspirations and passion for giving into a thoughtful approach that reflects their interests and goals," she says.

For more information about philanthropic partnerships at Pew, please contact Senior Vice President Sally O'Brien at 202-540-6226 or sobrien@pewtrusts.org.

Demetra Aposporos is the senior editor of Trust.

RETURN ON INVESTMENT

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

A leopard anemone floats freely through deep blue waters—a rare event as these shape-shifting creatures usually attach to hard surfaces such as corals or rocks for months at a time. More than a thousand species of sea anemones can be found in all depths of the Earth's oceans, including the high seas, which belong to no country. *Richard Robinson*

A commitment to protect the high seas

After a decade of discussions, debates, and meetings, the United Nations is moving forward with negotiations for an international treaty to protect the high seas. In July, countries negotiated recommendations for this first-of-its-kind ocean treaty that will govern areas beyond national jurisdiction. The treaty will provide a mechanism for protecting biodiversity in the high seas, including establishing marine protected areas. Pew's campaign to protect ocean life on the high seas had worked on behalf of the treaty and will continue to seek additional support for conservation provisions while working with U.N. member nations to set the timetable for treaty negotiations.

Congress takes steps to address maintenance backlog in national parks

In May, U.S. Representatives Will Hurd (R-TX), Derek Kilmer (D-WA), Dave Reichert (R-WA), and Colleen Hanabusa (D-HI) introduced a bill in the House of Representatives mirroring the Senate's National Park Service Legacy Act. The bipartisan legislation would direct federal funds toward National Park Service maintenance needs, ramping up to $500 million a year over a 30-year period. In June, Representative Mike Simpson (R-ID) introduced the Land and National Park Deferred Maintenance Act, which would dedicate $375 million a year to park maintenance for seven years and $25 million a year to other public land agencies for seven years and would authorize permanent funding for the Land and Water Conservation Fund. Revenue streams for both measures would come from mineral revenue not already assigned to other programs. Pew's project to restore America's parks supports these proposals.

Arbitration rule finalized

In July, the federal Consumer Financial Protection Bureau announced the finalization of a rule banning companies from using arbitration clauses that bar consumers from engaging in class-action lawsuits. It incorporates key Pew policy recommendations and cites the consumer finance team's work as part of its rationale. Each year since 2013, Pew has evaluated the dispute resolution policies and practices disclosed by the 50 largest retail banks in the U.S. In 2016, the review showed that almost three-quarters of banks' account agreements mandated pre-dispute arbitration. The study also found that 95 percent of consumers want to be able to have their disputes with banks heard in court.

States improve tax incentive policies using evidence-based findings

Lawmakers in Alabama and Minnesota used evaluations of tax incentives to help make major policy decisions in 2017. Alabama lawmakers used a rigorous evaluation to guide key reforms to the historic renovation credit, one of the state's largest incentives, which will cost $100 million over the next five years. Minnesota lawmakers were set to expand the state's research tax credit for businesses until a new analysis cautioned that the change could hurt the program's cost-effectiveness; the decision not to expand the credit is expected to save the state $190 million over four years. Both states began assessing existing economic tax incentive programs with assistance from Pew's state fiscal health team.

Mid-Atlantic fishery managers reduce East Coast squid trawling

The Mid-Atlantic Fishery Management Council voted in June to restrict trawling to protect spawning of longfin squid. Pew's U.S. oceans Northeast team helped organize more than 13,000 public comments and worked with scientists, recreational fishermen, and fishery managers to support the measure. The longfin squid is an important source of food for predators such as tuna and summer flounder, as well as whales, birds, sharks, crabs, and dolphins. Reductions in summer squid fishing in sensitive nearshore areas will prevent bycatch, damage to seafloor habitat, and the removal and damage of eggs, and will protect millions of spawning and embryonic squid.

New findings on how marine reserves alleviate effects of climate change

A new study published in June provides the first in-depth scientific review of the role marine reserves can play in building the ocean's resilience to the effects of climate change. Researchers from 10 institutions, including members of the Pew Bertarelli Ocean Legacy Project's scientific advisory board, found that large-scale reserves protect marine life and can also reduce the impact of ocean acidification and buffer against rising oceans and intensifying storms. Led by advisory board member Dr. Callum Roberts and Dr. Bethan O'Leary of the University of York in the United Kingdom, the work was published in the *Proceedings of the National Academy of Sciences*.

Conservation support in French Polynesia

The Pew Bertarelli Ocean Legacy Project launched a 20-day cultural expedition to the Austral Islands aboard the Faafaite, a traditional Polynesian canoe. The expedition, the first time a traditional canoe has visited some of these islands in generations, earned support from mayors, island communities, and local media outlets for the *rāhui*, the traditional Polynesian practice of restricting access to an area or resource in order to conserve it. French Polynesia President Édouard Fritch also coordinated a visit to one of the five inhabited Austral Islands, Tubuai, where he voiced support for the principle of the *rāhui*. Pew has been working to establish a highly protected reserve in French Polynesian waters since 2013. Support gained from the event is part of the broader Pew Bertarelli Ocean Legacy Project goal of increasing the number of fully protected parks in the ocean from nine to 15 by 2021.

New Mexico and North Dakota improve rainy day fund rules

Governors of North Dakota and New Mexico modified their states' stabilization funds with guidance from Pew's state fiscal health team. In May, North Dakota Governor Doug Burgum (R) signed legislation that will deposit oil and gas production tax revenue that exceeds $400 million, up to $475 million, in a given year into the state's rainy day fund. Also in May, New Mexico Governor Susana Martinez (R) signed a law that requires oil and gas emergency school tax revenue that exceeds the previous five-year average to go into the reserve fund. These improvements will help minimize revenue volatility and build reserves to soften the impact of future economic downturns.

U.S. government to support new approaches to fight bacteria

In May, the National Institute of Allergy and Infectious Diseases, a division of the National Institutes of Health, announced a grant to support scientists who are researching vaccines and other nontraditional products to treat or prevent bacterial infections. Pew's antibiotic resistance project identified this type of targeted, milestone-driven research in its *Scientific Roadmap for Antibiotic Discovery* report released in May 2016, which outlined a concrete approach to overcoming scientific barriers to combating antibiotic-resistant pathogens.

Pennsylvania approves pension reform

Governor Tom Wolf (D) signed bipartisan pension legislation in June that will help improve the sustainability and security of Pennsylvania's public employee retirement system. It ensures that Pennsylvania fulfills promises to state employees by maintaining and extending the commitment to fully fund the pension system and establishes a risk-managed hybrid plan for future public workers. The new plan protects taxpayers by improving cost predictability, preserves and improves retirement security for more workers, and saves the state between $5 billion and $20 billion over the next 30 years. The reform is the result of a multiyear effort by Pew's pensions team, which worked with legislators on both sides of the aisle, the governor, and business groups across the state. The team's research shows that this bill is one of the most comprehensive pension reform bills passed by any state.

INFORMING THE PUBLIC

European views of the EU and Brexit

The Pew Research Center released findings from its June report about attitudes on the European Union and the United Kingdom's planned withdrawal from the EU one year after the Brexit referendum. The report found that public sentiment in 10 European nations toward the EU has rebounded, but many surveyed supported a stronger role for their nations' governments in trade decisions and the holding of national referendums on EU membership. Center experts briefed stakeholders in Berlin, Brussels, London, Paris, Warsaw, and Washington, including EU Ambassador to the U.S. David O'Sullivan; the director general and members of the European Parliament; the U.S. State Department's Europe and Eurasia bureau; and the U.S. Mission to the EU.

The European Union flag flies at a bar on the beach in Mijas, Spain. The 12 gold stars symbolize unity among the 28 member nations. *Leon Neal/Getty Images*

2017 fellows Nichole Canuso and Annie Wilson, both choreographers and performers, embrace in celebration at the Pew Center for Arts & Heritage ceremony held in June honoring 53 new grants to cultural organizations and artists in the Philadelphia region. *Shannon Collins/The Pew Center for Arts & Heritage*

Pew Center for Arts & Heritage announces 2017 awards

In June, the Pew Center for Arts & Heritage hosted more than 120 members of the Philadelphia arts and culture community at the Christ Church Neighborhood House to announce its 2017 awards. This year, the center provided a total of more than $10.3 million in support of 39 project grants, two advancement grants, and 12 Pew fellowships in the arts. This funding will support individuals and organizations presenting exceptional cultural programming to a wide range of audiences.

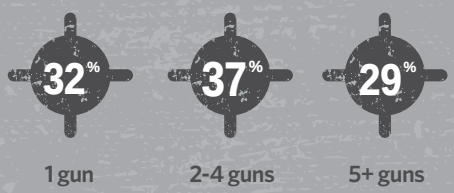
AMERICA'S COMPLEX RELATIONSHIP WITH GUNS

THE PEW RESEARCH CENTER TAKES AN IN-DEPTH LOOK AT THE ATTITUDES AND EXPERIENCES OF U.S. ADULTS.

Integrated into the fabric of society since the country's earliest days, guns remain a point of pride for many Americans, with most gun owners counting the right to bear arms as central to their freedom. At the same time, gun violence has shaken many Americans, and those who don't own guns view issues related to firearms differently from those who do. The Pew Research Center in June published a report that explored these differences.

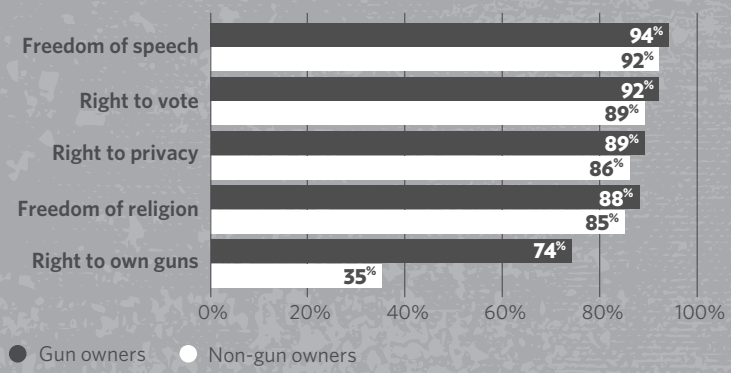
MAJORITY OF GUN OWNERS OWN MULTIPLE GUNS

Percentage of gun owners saying they own...



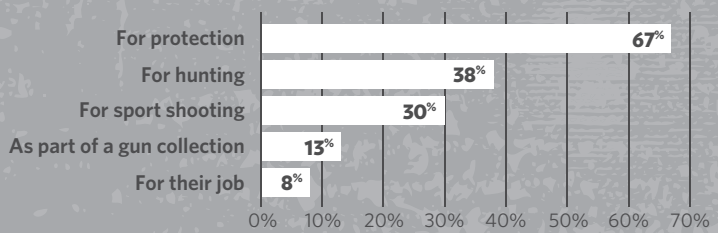
ABOUT THREE-QUARTERS OF GUN OWNERS SAY OWNING A GUN IS ESSENTIAL TO THEIR FREEDOM

Percentage saying each is essential to their own sense of freedom



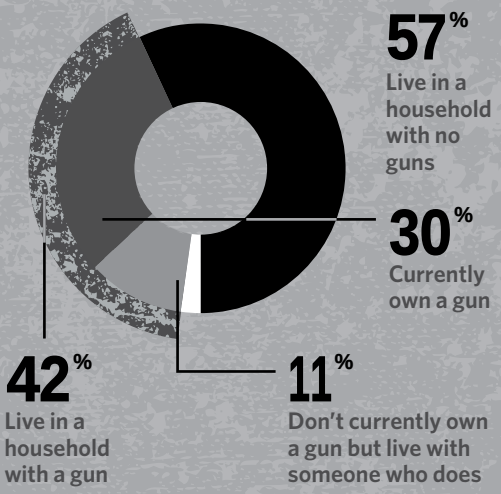
MOST GUN OWNERS CITE PROTECTION AS A MAJOR REASON FOR OWNING A GUN

Percentage of owners saying each is a major reason they own a gun



ABOUT 4-IN-10 ADULTS SAY THEY LIVE IN A GUN-OWNING HOUSEHOLD

Percentage of all adults saying they...



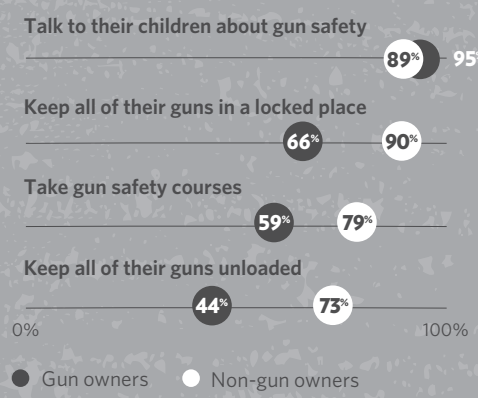
Note: Figures may not add to 100% or to subtotals indicated due to rounding.

PERCENTAGE OF ADULTS WHO...

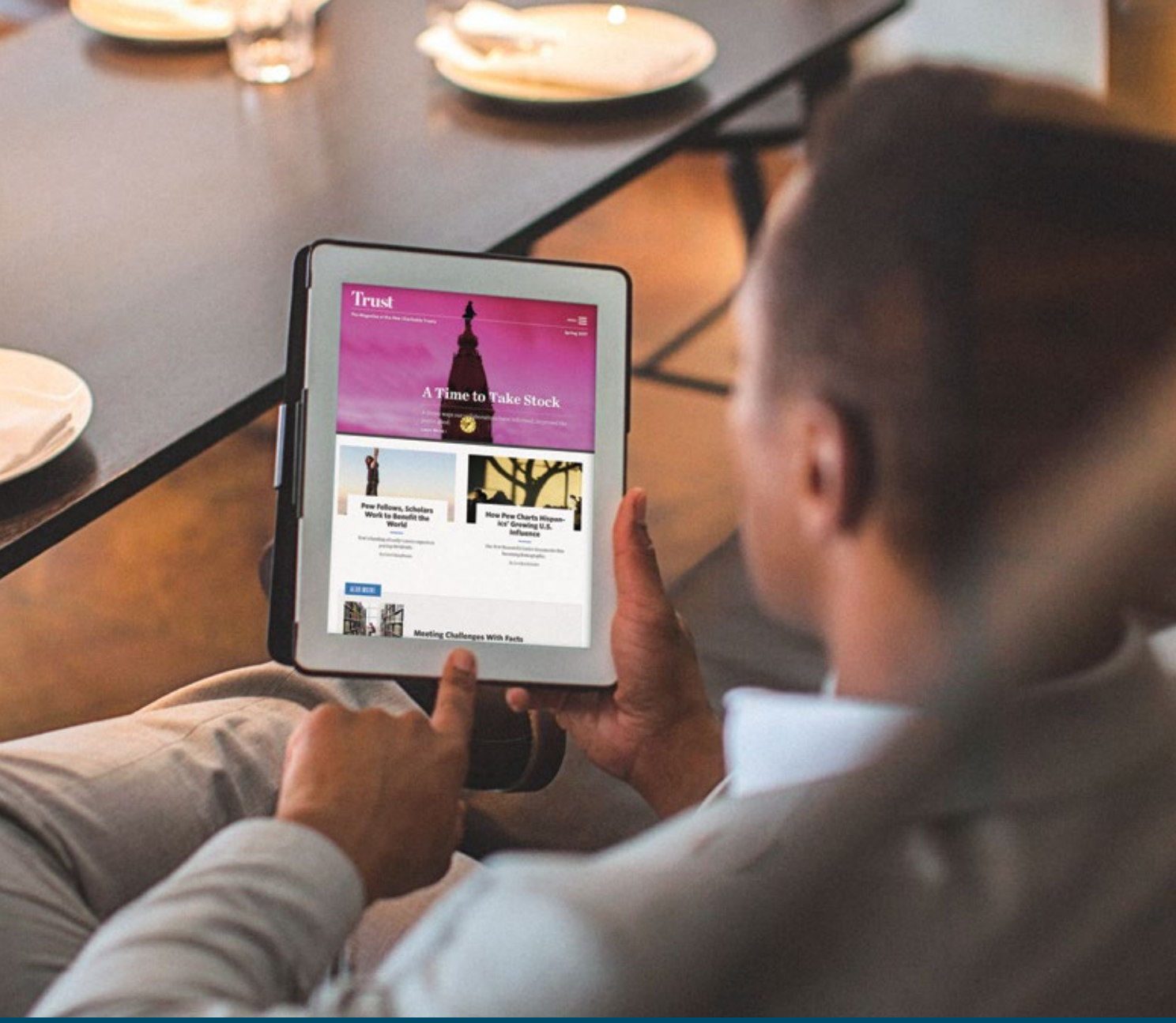
Grew up in a household with guns	48%
Say at least some of their friends own guns	59%
Have shot a gun	72%

DESPITE SOME AGREEMENT, GUN OWNERS AND NON-OWNERS MOSTLY DIFFER ON VIEWS OF KEY RESPONSIBILITIES OF GUN OWNERS

Percentage saying it is essential for owners with children at home to do each of the following:



Kodi Seaton/The Pew Charitable Trusts



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South Georgia and the Sandwich Islands are home to one-quarter of the world's penguins.

Penguins as Far as the Eye Can See, Page 34

Johnny Briggs/The Pew Charitable Trusts