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We Are Still Here

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The bats who live in and protect Portugal's libraries

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Cosmos Magazine | Valentina Boulter

Ultrasound 'helmet' for noninvasive treatment of Parkinson's

Single dose of LSD may treat generalized anxiety disorder for three months

Hidden depository of freshwater found beneath the ocean off Cape Cod

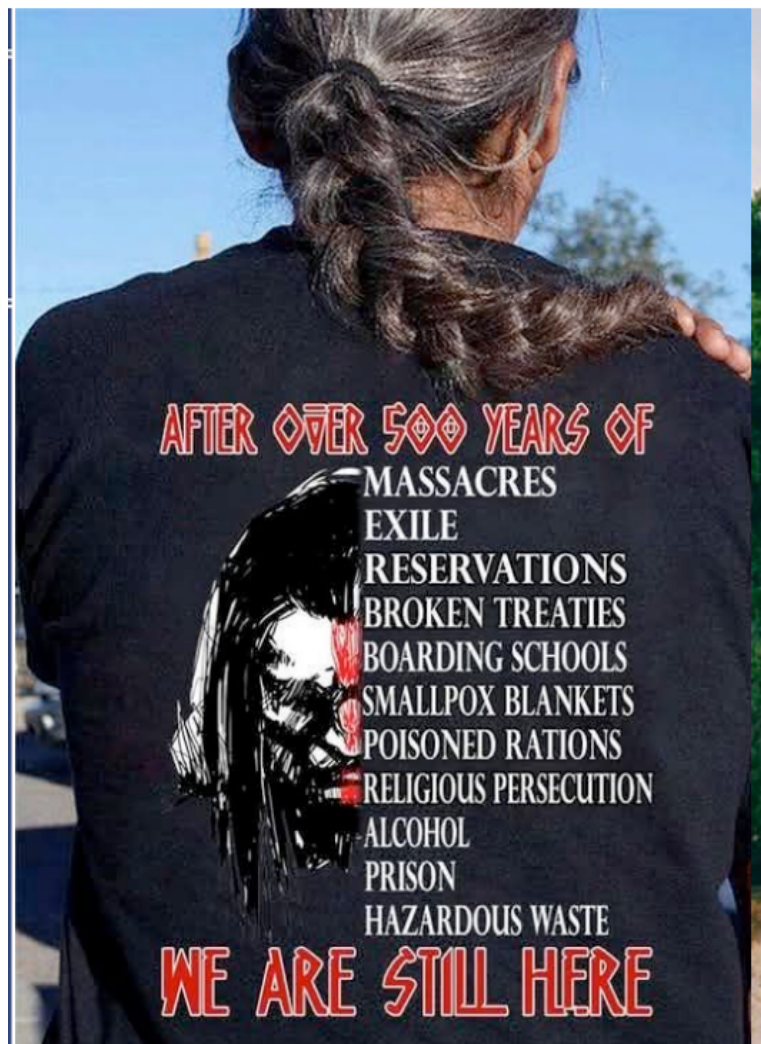
How AI is helping robots complete tasks in dynamic environments

Climate disasters threaten irreplaceable works of art. Museums have a battle plan

How Prehistoric Humans Survived a Supervolcano So Big We Probably Should Have Gone Extinct

Last Call for AAM 2026 Proposals

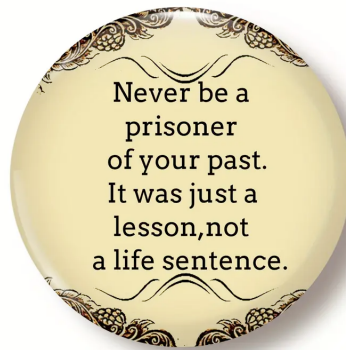
CDBG Grants Due September 30 (mix up w/ November 26 date)



Cost, service questions loom over revamped broadband push



The federal program intended to bring broadband internet to rural areas is moving into a new phase as states propose how they plan to use billions in grant funds under a new set of guidelines issued by the Trump administration this summer. [Read more...](#)



[The bats who live in and protect Portugal's libraries](#)

Two 18th-century libraries in Portugal, the Joanina Library at the University of Coimbra and the Library at the National Palace of Mafra, are home to colonies of bats. These bats are welcome guests because they eat insects that could damage the manuscripts. Visitors can try to see the bats emerge at nightfall in Coimbra or visit on a rainy day and hear them. While catching a glimpse of the bats in Mafra is difficult, the library displays taxidermied remains of former residents. [Learn more here.](#)

Found via [Smithsonian Magazine](#)[Open in new tab](#)

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**Comment On New FCC Proposed Rulemaking:** On Wednesday, August 14. The Federal Communications Commission (FCC) [released new proposed rulemaking](#) on "modernizing" their National Environmental Policy Act Rules. **Comments are due September 18, 2025.** NATHPO has already submitted the attached letter to FCC regarding their notification and "consultation" practices, and we will be submitting formal comment on the proposed new rulemaking itself by Thursday, a copy of which we will circulate later in the week.

**Nevada to invest \$375 million in high-speed internet expansion:** "Governor Joe Lombardo announced the submission of Nevada's Broadband Equity, Access, and Deployment (BEAD) Final Proposal to the National Telecommunications and Information Administration for formal approval. This initiative, combined with previous investments, aims to provide reliable high-speed internet to nearly 50,000 unserved and underserved homes, businesses, and community institutions across the state." ([News 3 Las Vegas](#))

## Ancient DNA Charts Native Americans' Journeys to Asia Thousands of Years Ago

**Analysis of ten Eurasian individuals, up to 7,500 years old, gives a picture of movement across continents.**

[Smithsonian Magazine](#)

[Brian Handwerk](#)



*Mariana-Rusanovschi/Getty Images*

Whether by walking a land bridge or traveling by boat, hunter-gatherers ventured out from eastern Eurasia some [20,000 to 30,000 years ago](#) to become the first Americans. But the intercontinental journey wasn't a one-way trip. Several times in history, genetic studies show, Native Americans returned across the Bering Strait to Eurasia—long before Europeans began arriving in distant parts of the Americas.

Genetic research is mapping out those ancient migrations back and forth across the Bering Strait and elsewhere across Eurasia during key periods of human prehistory. In 2023, scientists recovered ancient DNA from the well-preserved bones and teeth of ten eastern Eurasian individuals, from 7,500 to 500 years old, and they [published](#) their findings in *Current Biology*. Their evidence helps show that from the coasts of America and Japan to the Siberian interior, some of our deep ancestors' populations may have been more mobile and intermixed than anyone would have imagined.

Cosimo Posth, an archaeogenetics expert at the University of Tübingen, in Germany, and colleagues described the genomes of ten different individuals who lived in three key regions: Siberia's Altai Mountains, the Kamchatka Peninsula and other parts of the Russian Far East. Environmental conditions—cold climates at high latitudes—allowed for optimal preservation of DNA that was hundreds to thousands of years old. “In these environments you can find individuals with 70 to 80 percent of human DNA in their bones, comparable to what you'd get if you extracted saliva from you or me,” says Posth. “You can actually generate a genome of the same quality as a modern genome. It's amazing stuff.”

Analysis of the DNA from those ten individuals provided several key revelations about ancient migrations. First, the broad movements of ancient humans and cultures across Eurasia are evidenced by the discovery of an entirely new population that lived in Siberia's Altai Mountains. That culture's descendants, the authors show, were part of lineages that later helped populate both Europe and the Americas. Secondly, individuals of Japan's Jomon culture, isolated in the archipelago for thousands of years, migrated back to the Asian mainland from which their ancestors came. And finally, Native Americans migrated back into Asia several times over a span of thousands of years.

The remains of some of the study's oldest individuals, dated to some 7,500 years before present, are part of the previously unknown population of hunter-gatherers who lived in the Altai Mountains. Today this crossroads is a kind of Eurasian four corners where Russia, Mongolia, China and Kazakhstan border one another. Back in the early Holocene, at least 10,000 years ago, the Altai population lived in a region that was slowly warming. Posth's analysis shows that this group was a genetic mixture of two distinct groups who lived in different parts of Siberia during the last Ice Age: the Paleo-Siberians and the Ancient North Eurasians. The Paleo-Siberian population [contributed to the first wave of humans to cross into the Americas](#), and many Native Americans today can trace parts of their ancestry to this group. The ancient North Eurasian lineage first appears in a 24,000-year-old Mal'ta individual from the Lake Baikal region and over time made significant genetic [contributions to nearly all European populations](#), and to later North American migrations as well.

Siberia's Altai Mountains are the same region where the [2010 discovery of a fragmented finger bone](#) turned out, after DNA analysis, to identify an entirely new species of close human relatives —the Denisovans. Their lineage, which existed from about 400,000 to about 30,000 years ago, has turned out to be a [rather complicated](#) one. In 2018, scientists learned that a 13-year-old girl, found in a mountain cave, was born to a [Denisovan mother and a Neanderthal father](#), showing that different species not only crossed paths in the region but also interbred.

“This seems to also be a crucial region for us, for humans,” Posth says. “It might be that this was a corridor and crossroads for populations to mix.”

Posth was surprised by the scale of human migrations revealed by the diverse DNA. “I expected movement maybe from one valley to another, but here we're talking about large-scale movement and mobility among these groups across vast areas of North Asia.” According to co-author Ke Wang, of China's Fudan University, one individual in Nizhnytnytsken Cave was found with burial goods like stone points, ornaments and animal claws that may indicate religious overtones and the possible practice of shamanism. That 6,500-year-old individual's genetic profile was different from his Altai region contemporaries and more akin to populations from the Russian Far East, suggesting he could have been from a genetically — and culturally — distant region.

These types of mixing migrations gave rise to the unique Altai population, and similar events can be traced in the genes of its descendants as well. For example, genetic evidence suggests this Altai hunter-gatherer population may be the source of the ancient North Eurasian ancestry uncovered in groups like the [Tarim Basin mummies](#) and the Bronze Age cultures of the [Lake Baikal region](#) of southern Russia.

The study also revealed connections between the remains of 7,000-year-old individuals from the Russian Far East and the islands of Japan. The remains had significant amounts of ancestry related to the Jomon, a population of hunter-gatherers from the Japanese archipelago

[Genomic analysis suggests](#) that the Jomon, [makers of a unique pottery](#), lived in relative isolation from between 20,000 to 15,000 years ago until [almost 3,000 years ago](#), when the traditional hunter-gatherers mixed with a new influx of rice growers in the islands. But the study reveals that some Jomon left the islands for the mainland before that mixing, crossing the sea prior to 7,000 years ago.

The findings also reveal ancient comings and goings across the Bering Strait. Scientists have already stated that groups in Asia made at least three major migrations into the Americas—roughly 20,000, 5,000 and 1,000 years ago. But those events represent only half of the story; growing genetic and archaeological evidence reveals that some populations made a round-trip journey. The new study identifies the timing of some back migrations, and it shows they were extensive enough that Native American lineages stretch away from the coast, reaching the Kamchatka Peninsula and central Siberia.

Posth and colleagues compared the genomes of three 500-year-old individuals in the Kamchatka Peninsula with people living there today. “The 500-year-old individuals have significant amounts of Native American ancestry,” he says, “but those living in the same peninsula today have twice as much.”

That result means that some Native Americans had returned to Eurasia before 500 years ago, probably about 5,000 years ago, according to estimates of when the genetic lineages converged in the ancient specimens. And they also reveal that Native American peoples migrated across the Bering Strait more recently. Scientists can’t definitively say where those migrations originated; each of the Native American populations the group tested—the ancient Aleut, Athabaskan and Old Bering Sea lineages—could have worked as a proxy source for the genetic input.

Finding genetic evidence of Native Americans in Eurasia isn’t surprising, notes David Meltzer, an anthropologist at Southern Methodist University not involved with the study. “When Beringia [the land bridge] drowned approximately 12,000 years ago, that only meant it was no longer possible to walk from Northeast Asia to America. Starting around 6000 years ago, maybe slightly earlier, groups using watercraft readily crossed the Bering Sea.”

Previous [genetic evidence found](#) in both ancient remains and among contemporary Chukchi peoples of Siberia had already suggested that humans moved in both directions across the Bering Sea thousands of years ago. “What this new paper does,” says Meltzer, “is give us a better sense of the number and possible timing of episodes of back migration.”

*Brian Handwerk is a science correspondent based in Amherst, New Hampshire.*

**Smithsonian**  
MAGAZINE

*This post originally appeared on Smithsonian Magazine and was published January 11, 2023. This article is republished here with permission.*

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Inside the world's largest two-headed calf collection

The Two-Headed Calf MOOseum in San Francisco contains 50 taxidermied cow heads, all of which are paired with another one. They are the result of rare genetic mutations called polycephaly, that is, two-headedness. The museum is run by punk musician Henry Rosenthal, who first became captivated by the rare phenomenon in his 20s. Learn more about the exhibit [here](#).

Found via [Atlas Obscura](#)[Open in new tab](#)

12 murals and public art pieces to admire in Reno

Extract:

Nevada Row mural **Where: Midtown District** **Artists: Erik Burke and Joe C. Rock**

Featuring portraits of individuals who made significant yet unconventional contributions to Nevada's history, this collaborative mural measures 250 feet by 20 feet. Painted in 2016, it features architect Frederic Delongchamps, basket weaver Dot So La Lee, Paiute religious leader Wovoka, rancher Ben Palmer, landscape artist Michael Heizer, Nevada Historical Society founder Jeanne Wier, President Abraham Lincoln, African American boxer Jack Johnson, Northern Paiute activist Sarah Winnemucca, and author Mark Twain. Those native to Nevada are depicted in blue, while those from outside Nevada are depicted in warm tones.



The Nevada Row mural features people who were significant to Nevada's history. (Visit Reno Tahoe)

The Great Basin Indigenous Mural **Location: UNR** **Artist: Autumn Harry**

A member of the Pyramid Lake Paiute Tribe, Autumn Harry's mural depicts a visual representation of Native American communities in Nevada through the years, specifically in the Great Basin region. A tool for empowerment and [cultural preservation](#), it provides representation for Native American students, staff, faculty, community members, and visitors at the University of Nevada, Reno. It is located on the west/northwest side of the Ansari Business Building.

Lahontan Cutthroat Trout **Where: Midtown District** **Artist: Louis Masau**

An environmental street artist from London, Louis Masau, added the Lahontan Cutthroat Trout to his portfolio of murals of endangered creatures, painting it on the side of a building on S. Virginia Street in 2016. Nevada's state fish is indigenous to the Great Basin area, named after the Pleistocene-era Lake Lahontan in Northwestern Nevada. Walker Lake and Pyramid Lake are



remnants of the ancient lake.

An endangered Lahontan Cutthroat Trout is immortalized in this mural in Midtown Reno. (Visit Reno Tahoe)

For full story: <https://thenevadannews.com/community/must-see-murals-and-public-art-pieces-across-reno/>

36th annual Outhouse races return to Virginia City

By **Kevin Sheridan**

VIRGINIA CITY, Nev. (KOLO) - The 36th annual Outhouse Races will return to Virginia City this October.

The races will be held on Oct. 4 and Oct. 5 from 10:00 a.m. to 4:00 p.m. each day. Racers will barrel their way down C Street in the mountain town.

The free to attend event will feature live music and food vendors.

"The Outhouse Races embody Virginia City's quirky personality and community spirit," said Todd Tuttle, tourism director for Virginia City. "What began decades ago as a cheeky protest has become one of Nevada's most iconic traditions, drawing thousands of visitors each year. It's the kind of event that captures both our sense of humor and our deep connection to history. We invite families, friends and fans who enjoy a good laugh to line C Street, cheer on the racers and spend the weekend exploring everything our town has to offer, from historic saloons and shops to museums and attractions that bring our past to life."

Trump administration calls minority grant funding "racially discriminatory," redirects money to charter schools

CSU Chancellor says decision to end funding will have "an immediate impact and irreparable harm to our entire community"

By **Molly Gibbs** | mgibbs@bayareanewsgroup.com | Bay Area News Group

The Trump administration announced Monday it would redirect funding for minority-serving institutions into U.S. charter schools to support school choice.

The Department of Education said following the release of the 2024 National Assessment of Educational Progress scores last week, which "showed dismal educational outcomes across the nation," the department is shifting funding to "advance President Trump's priorities."

[Testing data released last week](#) revealed that, overall, students' scores were lower in 12th grade math and reading and 8th grade science than the last time students were tested in 2019.

In May, U.S. Secretary of Education Linda McMahon announced that the department planned to increase charter school funding by \$60 million for fiscal year 2025, raising the program's total budget to \$500 million.

The additional funding announced Monday comes from discretionary grant programs the Trump administration ended funding for last week, including Hispanic-serving institutions (HSI) and other minority-serving institutions, arguing the programs were "racially discriminatory" because they required schools to maintain a percentage of minority students in their total student enrollment. For Hispanic-serving institutions, at least 25% of schools' student body must be Hispanic students, while at least 40% of predominantly Black institutions' student body must be Black.

According to California State University, 21 of the university's 22 campuses meet the criteria to qualify as a Hispanic-serving institution. CSU Chancellor Mildred García said last week the

university is “deeply troubled” by the Trump Administration’s decision to end funding for the grant program and the action will have “an immediate impact and irreparable harm to our entire community.”

“Hispanic students account for nearly half of the CSU’s total student population and reflect the extraordinary diversity of the state of California, which makes the CSU truly unique,” García said. “Without this funding, students will lose the critical support they need to succeed in the classroom, complete their degrees on time, and achieve social mobility for themselves and their families. Federal HSI funding is used by the CSU to support all CSU students, not just Hispanic students.”

The Department of Education also announced Monday a one-time investment of \$495 million in funding to Historically Black Colleges and Universities and Tribally Controlled Colleges and Universities, bringing the total funding for HBCUs to \$1.34 billion and for TCCUs to \$108 million for fiscal year 2025. The department also said it would invest over \$160 million in American history and civics grants.

“The department has carefully scrutinized our federal grants, ensuring that taxpayers are not funding racially discriminatory programs but those programs which promote merit and excellence in education,” McMahon said in a statement Monday. “The Trump Administration will use every available tool to meaningfully advance educational outcomes and ensure every American has the opportunity to succeed in life.”

Related Article

- [Private school for Native Hawaiians vows to defend admissions policy from conservative strategist](#)

Scientists develop 3D printer for bone grafts Cosmos Magazine | Valentina Boulter

The device resembles a glue gun and was used to print bone-like material directly onto rabbit leg fractures. The new treatment resulted in improved bone tissue formation and denser bone growth. ([Read](#))

> Ultrasound 'helmet' for noninvasive treatment of Parkinson's

The Guardian | Ivana Drobnjak O'Brien. A potential replacement for highly invasive deep brain stimulation treatments involving electrical pulses, the device uses an ultrasound system to target regions of the brain responsible for tremors. ([Read](#))

> Single dose of LSD may treat generalized anxiety disorder for three months

NPR | Jon Hamilton. A proprietary form of LSD was given to adults with GAD, and those who received higher doses showed improvements, though factors related to the environment the drug was administered may have played a role. ([Read](#))

“The beautiful thing about learning is nobody can take it away from you.”

B.B. King

> **Hidden depository of freshwater found beneath the ocean off Cape Cod AP | Staff.** The aquifer is thought to extend from New Jersey to Maine and may be one of many reservoirs existing below shallow salt waters. Growing global demand for freshwater is expected to drive discovery and drilling into these reserves. ([Read](#))

> **How AI is helping robots complete tasks in dynamic environments IEEE Spectrum | Evan Ackerman.** Boston Dynamics, known for its Atlas humanoid robots, has been incorporating large behavior models built from motion capture data to expand its robots' movement and adaptability. ([Read](#))

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**Climate disasters threaten irreplaceable works of art. Museums have a battle plan.**

Curators and conservators are finding innovative solutions to protect our history from disaster. Will some be destroyed despite their best efforts?

[https://www.nationalgeographic.com/culture/article/climate-change-artifacts-art-preservation?rid=C38947501E68571D7AA5496FBC02C266&cmpid=org=ngp::mc=crm-email::src=ngp::cmp=editorial::add=Daily\\_NL\\_Monday\\_History\\_20250915](https://www.nationalgeographic.com/culture/article/climate-change-artifacts-art-preservation?rid=C38947501E68571D7AA5496FBC02C266&cmpid=org=ngp::mc=crm-email::src=ngp::cmp=editorial::add=Daily_NL_Monday_History_20250915)

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How Prehistoric Humans Survived a Supervolcano So Big We Probably Should Have Gone Extinct

A massive eruption 74,000 years ago shook the planet, and archaeologists are using volcanic glass to figure out how humans made it through.

https://gizmodo.com/how-prehistoric-humans-survived-a-supervolcano-so-big-we-probably-should-have-gone-extinct-2000658378?utm_source=firefox-newtab-en-us



The Toba Supereruption from 74,000 years ago was 10,000 more powerful than the Mt St. Helens eruption of 1980 (pictured). © USGS

From National Geographic

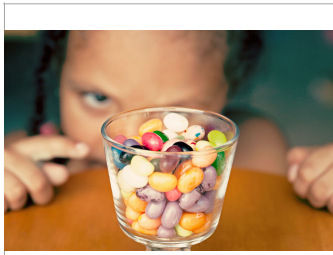
Back-to-school season means kids are sitting in classrooms, writing school reports, and taking tests—but these aren't the only ways youngsters can learn. Bring out your kids' inner brainiac with bird-watching, a silly quiz, and even jelly beans.

Plus, do *your* kids have big, brainy questions? We're looking for smart questions from *Nat Geo Kids* readers to answer in an upcoming issue. Send us their questions here, and put "Big Question" in the subject line!



CAN BIRD-WATCHING IMPROVE YOUR CHILD'S MEMORY?

Dust off the binoculars! Autumn is the perfect time to pick up bird-watching as fliers journey on their fall migration. And this hobby isn't just fun—research is showing that expertise in any topic might help people retain more information.



PHOTOGRAPH BY ANYA BREWLEY SCHULTHEISS / GETTY IMAGES

BRAINY TRICKS TO MAKE YOUR KIDS MATH GENIUSES

How many jelly beans are in that jar? This carnival game is actually a chance for kids to stretch their estimation skills—a crucial ability for children to learn. Use these hacks to help your kids win a counting contest, plus get four other estimation exercises.

GUESS THE JELLY BEANS

Last Call for AAM 2026 Proposals

Submit your proposal for AAM 2026 in Philadelphia by **September 26**.

Next year's theme, The Museum Odyssey, offers five tracks for exploring museum work through the prism of time. [Learn more »](#)

	U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT WASHINGTON, DC 20410-5000

September 16, 2025

SUBJECT: Indian Community Development Block Grant – Notice of Funding Opportunity

Dear Tribal Leader:

I am pleased to announce that on September 9, 2025, the U.S. Department of Housing and Urban Development (HUD) published the Fiscal Year (FY) 2025 Notice of Funding Opportunity (NOFO) for the Indian Community Development Block Grant (ICDBG) program ([FR-6900-N-23](#)).

The NOFO announced the availability of approximately \$70 million to eligible Tribes and Tribal organizations for the development of viable American Indian and Alaska Native communities, including the creation of decent housing, suitable living environments, and economic opportunities primarily for people with low- and moderate-incomes.

Applicants have until 11:59:59 p.m. Eastern Daylight Time on **November 24, 2025**, to submit applications via [Grants.gov \(www.grants.gov\)](#). Applicants unable to submit an application electronically may request a waiver in accordance with Section IV.A. of the NOFO. For further information about this funding opportunity, please visit [Grants.gov](#) and Codetalk ([www.hud.gov/codetalk](#)).

HUD will provide information on training opportunities on the ICDBG NOFO in the near future. All interested applicants are encouraged to participate in this training before submitting an ICDBG application. Interested applicants should also check Codetalk regularly for updates about the program and training materials.

This is a great opportunity to fund projects in your communities. I encourage you to apply for funding and participate in the training sessions. If you have questions about the NOFO, please contact ONAP-ICDBG@hud.gov or your Area ONAP Office.

Thank you for your interest in the ICDBG program and for your continued partnership and collaboration in serving Indian Country.

Sincerely, Hilary C. Atkin, Acting Deputy Assistant Secretary for Native American Programs

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DUE SEPTEMBER 30: THPO GRANT APPLICATIONS

**ATTENTION THPOS: Your FY2025 Grant Applications Are Due September 30, 2025.** The National Park Service (NPS) has recently communicated that September 30, 2025, is the final deadline for THPOs to complete and submit their [FY 2025 Grant Applications](#). As you may already know, applications NPS receives after August 29 may not be funded until late October due to a system blackout from mid-September to mid-October.

IAssistant Norma Streeter-Hamilton ([norma\\_streeter-hamilton@partner.nps.gov](mailto:norma_streeter-hamilton@partner.nps.gov)). Apply for your FY 2025 THPO Grant [HERE](#). If you are unable to complete your application by the September 30 deadline, need assistance with your application, or have additional questions, including on your apportionment amount, please contact the NPS THPO address ([thpo\\_program@nps.gov](mailto:thpo_program@nps.gov)) or call the main line at 202-354-2020