



2025 ANNUAL REPORT

PAN AMERICAN INSTITUTE OF GEOGRAPHY AND HISTORY
UNITED STATES NATIONAL SECTION



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GLOSSARY OF ACRONYMS

ACAN	Advisory Committee on Antarctic Names
AI	Artificial Intelligence
CRE	Community Resilience Estimates
CAF	Latin American Development Bank
FGDC	Federal Geographic Data Committee
GeoSUR	South American Geospatial Network Program
GIS	Geographic Information Systems
HLG-IGIF	High-Level Group of the Integrated Geospatial Information Framework
IACHR	Inter-American Commission on Human Rights
IHO	International Hydrographic Organization
IMNA	Integrated Map of North America
ION	Institute of Navigation
METEOR	Meter Loan Program
MOU	Memorandum of Understanding
NGA	National Geospatial-Intelligence Agency
NGDA	National Geospatial Data Assets
NSDI	National Spatial Data Infrastructure
OAS	Organization of American States
OGC	Open Geospatial Consortium

PAIGH	Pan American Institute of Geography and History
UNGEGN	United Nations Group of Experts on Geographic Names
UN-GGIM	United Nations Committee of Experts on Global Geospatial Information Management
UN-GGIM: Americas	United Nations Committee of Experts on Global Geospatial Information Management Regional Committee for the Americas
UN-GGIM: Arab States	United Nations Committee of Experts on Global Geospatial Information Management Regional Committee for the Arab States
UN-GGKIC	United Nations Global Geospatial Knowledge and Innovation Center
UN-IGIF	United Nations Integrated Geospatial Information Framework
USGS	United States Geological Survey
USNS	United States National Section



INTRODUCTION

The United States National Section (USNS) of the Pan American Institute of Geography and History (PAIGH) is pleased to submit this report of USNS activities for the period of October 1, 2024, through September 30, 2025. Included are significant activities, summaries of meetings, reports from the USNS Cartography, Geography, Geophysics, and History Commission Representatives, and the USNS roster.

HIGHLIGHTS OF 2025 ACTIVITIES

- Paul Cooper, a long-time member of the USNS, was awarded the 2024 Pan American Decoration at the 25th PAIGH General Assembly and accepted the award at this year's USNS Annual Meeting.
- USNS Executive Secretary Paul Riley and USNS History Commission Representative Erick Langer have been exploring archived documents and building a history of the USNS in preparation for the upcoming PAIGH Centennial.
- In August 2025, USNS President Deirdre Dalpiaz Bishop was named Co-Chair of the 15th Session of the United Nations Committee of Experts on Global Geospatial Information Management.



USNS LEADERSHIP



DEIRDRE DALPIAZ BISHOP

President

Geography Division Chief, U.S. Census
Bureau



PAUL RILEY

Executive Secretary

Geographer, U.S. Census Bureau



JULIANNA AYNES-NEVILLE

Development Counselor, U.S. Mission to the
Organization of American States

U.S. State Department

FROM THE PRESIDENT'S DESK



In 2025, the PAIGH excelled at its mission to promote cartographic, geographic, historic, and geophysical studies and endeavors. The USNS is honored to be a part of this important organization and to lead members of the U.S. in collaborating with other PAIGH members on research, technical assistance projects, and publications in support of this work. We look forward to the continued success of PAIGH and the cooperation between the Institute, the USNS, and other international organizations in promoting and advancing these areas of science in the Americas and beyond.

USNS members have a strong presence in many facets of the national and international community. A few highlights of 2025 USNS activities follow:

- The 2025 PAIGH USNS Annual Meeting was held on April 8-9, 2025, in Washington, DC. Many members gathered at the Brigham Young University Barlow Education Center, where technology allowed others to join virtually.
- USNS representatives affiliated with the Cartography Commission are producing authoritative topographic data at the 1:250,000 scale for integration into a web-based service of topographic data for the United States, Mexico, and Canada.
- Related to the Geography Commission, USNS members participated in several conferences and organizations, and published papers. Several members are working to create, disseminate, and promote educational research tools and applications.
- Geophysics Commission activities of the USNS this year focused on strengthening the geodetic network across the Americas and providing technical support to countries faced with rebuilding following natural disasters.
- USNS members involved with the History Commission delivered many lectures and published several papers relevant to the mission of PAIGH.

- Members of the Geography and History Commission researched the history of the USNS at the National Archives and Records Administration and the Library of Congress.

Overall, the USNS continues to thrive through the support and dedication of members representing the U.S. cartography, geography, geophysics, and history communities. We welcomed new members to the USNS in 2025, including representatives of the public and academic sectors. We are honored to welcome these professionals to the USNS.

U.S. STATE DEPARTMENT UPDATE

Leadership

The Organization of American States (OAS) saw many changes this year, beginning with leadership. Albert Ramdin, the former foreign minister of Suriname and former OAS Assistant Secretary General, was elected to the Secretary General position and began his term in May 2025. Secretary General Ramdin brings extensive experience and leadership to the role, and is committed to building a stronger, more transparent, and results-driven OAS.

Elections were also held for the Assistant Secretary General position in May at a Special Session of the OAS General Assembly. This was a historic moment for the OAS, as all the candidates, nominated by Colombia, Guatemala, and Peru, were women. Ambassador Laura Gil from Colombia was elected by member states, becoming the first woman in the OAS's history to hold this position. She assumed office in July 2025.

In 2024, an external consulting firm conducted a comprehensive institutional review and issued over 150 recommendations aimed at improving efficiency and effectiveness. One key recommendation was the creation of an Executive Director position. On August 6, 2025, the OAS Permanent Council approved a resolution titled, "Structure of the General Secretariat," which outlined the new

organizational chart for the General Secretariat and included the new management across the organization.



Figure 1: 55th OAS General Assembly

55th OAS General Assembly

The 55th OAS General Assembly took place in Antigua and Barbuda June 25-27, 2025, with a theme of “Building Resilient, Inclusive Economies in the Americas.” One key resolution passed by member states was “Calling for Concrete Solutions to be brought to bear as a Matter of Urgency to Resolve the Grave Security and Institutional Crisis in Haiti,” which urges effective coordination of inter-American and international cooperation to respond coherently and sustainably to the major challenges facing the Haitian people.

Deputy Secretary of State Christopher Landau led the U.S. delegation and reaffirmed the United States’ commitment to the Western Hemisphere. One notable accomplishment for the U.S. was the election of Rosa María Payá, the U.S.-nominated candidate, to the Inter-American Commission on Human Rights (IACHR). Payá’s victory demonstrates the U.S. commitment to strengthening democratic governance, defending human rights, and promoting meaningful IACHR reform.

2026 Operational Budget

The OAS operational budget is expected to be approved during the Special Session of the OAS General Assembly scheduled to take place October 15, 2025.



PARTICIPATION IN PAIGH EVENTS AND REGIONAL COLLABORATIONS

11TH SESSION OF UN-GGIM: AMERICAS

October 7, 2024 – Mexico City, Mexico

Deirdre led the U.S. Delegation at the 11th Session of United Nations Committee of Experts on Global Geospatial Information Management Regional Committee for the Americas (UN-GGIM: Americas) held on October 7, 2024, at the National Institute of Statistics and Geography in Mexico City. The Regional Committee convened seven sessions covering the following topics:

1. Subregional Activities.
2. Regional Thematic Networks and Collaboration Initiatives.
3. Evaluation of the Work and Functioning of the Regional Committee – Needs, Challenges, and Priorities for 2025.
4. Regional Report.
5. Regional and Interregional Cooperation.
6. Progress of the Working Groups following the Resolutions of the 10th Session.
7. Adoption of 11th Session Resolutions.

Deirdre emphasized the continued growth and strength of UN-GGIM: Americas. Member States and Regional Committees maintain strong collaboration through regular information sharing and workshops. The Economic Commission for Latin America and the Caribbean now hosts a stable web presence for the Regional Committee. Interest in new technologies and innovation is strong, highlighted by the launch of a new Geospatial Artificial Intelligence (AI) Community of Practice.

As the work of UN-GGIM: Americas progresses, it will be important to align the Americas strategic goals with those of the other UN-GGIM Regional Committees (Africa, the Arab States, Asia and the Pacific, and Europe), as well as with the new Centers of Excellence in Bonn, Germany, Deqing, China, and the emerging Center in Riyadh, Saudi Arabia.



Figure 2: U.S. Delegation at the PAIGH Headquarters (from left: Paul Riley, Tim Trainor, Deirdre Bishop, Patricia Solís, Charlotte Smith, Emily Carlson, Lidia Lopez).

Following the formal proceedings, participants attended a reception hosted at the PAIGH Headquarters, which included a tour of the recently restored historic building and engagement with colleagues from around the world.

7TH HIGH LEVEL FORUM

October 8-11, 2024 – Mexico City, Mexico

The 7th High Level Forum was convened on October 8-11, 2024, immediately following the UN-GGIM: Americas meeting. The overarching theme of the Forum was “Accelerating Implementation: Achieving Resilience.” The Forum included 235 representatives from 47 countries in attendance. The Forum addressed the acceleration of the achievement of the Sustainable Development Goals through implementation of the United Nations Integrated Geospatial Information Framework (UN-IGIF), utilization of geospatial information to understand, communicate, and manage climate-related issues and challenges, and exploration of strategies to develop geospatial capacity, leverage innovative tools and technologies, and foster partnerships towards delivering positive social, economic, and environmental outcomes.

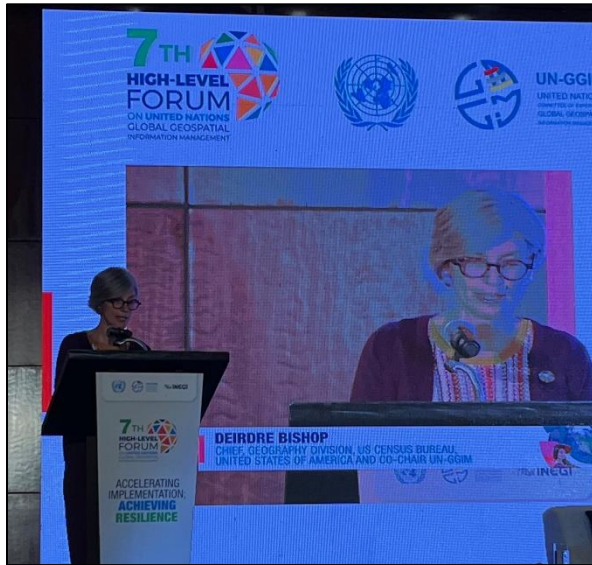


Figure 3: Deirdre Bishop presenting at the 7th High Level Forum.

On October 8, Deirdre delivered the opening address and served as moderator for the first session, “Accelerating Implementation of the UN-IGIF.” Her remarks highlighted the critical role of data and technology in addressing global challenges, such as clean water, disaster response, health security, and digital equity. She illustrated how the UN-IGIF serves as a foundational framework for the development of a strong geospatial infrastructure, linking essential

information about people, businesses, and the environment, to drive informed decision making and meaningful change.

She also moderated an esteemed panel of women leaders from Indonesia, South Africa, and the Organization of Eastern Caribbean States, who shared their country-level experiences implementing the UN-IGIF.

In her capacity as Co-Chair of the UN-GGIM Committee of Experts, on October 11, Deirdre participated in a closed meeting of authorities from the UN-GGIM Committee of Experts. Discussions focused on reviewing the 2024-2025 Regional Work Plans, advancing a joint initiative between UN-GGIM and the United Nations Committee of Experts on Geographic Names



Figure 4: 7th High Level Forum Session. From left: Deirdre Bishop, Maroale Chauke (South Africa), Belinda Morgono (Indonesia), Valrie Grant (Organization of Eastern Caribbean States).

(UNGEEN), and outlining a schedule for completion of the 2025-2030 UN-GGIM Strategic Framework.

25TH GENERAL ASSEMBLY OF PAIGH

November 19-21, 2024 – Santiago, Chile



Figure 6: Members of the USNS. From left: Lidia Lopez, Evan Ward, Deirdre Bishop, and Paul Riley.

Numerous members of the USNS participated in the 25th General Assembly of PAIGH last November. Deirdre was elected President of the Scientific Policy Committee and played a leading role in guiding scientific discussions throughout the Assembly. She facilitated in-depth conversations on strengthening geospatial capacity across the region, promoted the use of the United Nation's second level of administrative boundaries, and highlighted the establishment of a new Memorandum of

Understanding (MOU) between Esri and PAIGH. She also shared insights on the [National Atlas of Korea](#). In her role as Co-Chair of the High-Level Group of the Integrated Geospatial Information Framework (HLG-IGIF), she also provided an update on global progress in the use and implementation of the UN-IGIF over the past year. The General Assembly expressed particular interest in accessing communications materials, the newly released Sustainable Funding Guide and Geospatial Value Study Inventory, resources aimed at helping Member States build support for UN-IGIF adoption among national leaders and decision



Figure 5: Deirdre Bishop as President of the PAIGH Scientific Policy Committee.

makers. Deirdre shared these materials and resources along with preliminary findings from the 2024 UN-IGIF global survey.

USNS members were recognized for their work. David Salisbury was recognized by the Geography Commission for his work on the Atlas for Climate Change. Patricia Solís received positive feedback from the Assembly for her advocacy to increase the participation of women in geography. Paul Cooper was honored with the Pan American Decoration for Geography and History, being the first to receive the prestigious Pan American Decoration, which was established at the 24th General Assembly.



Figure 7: PAIGH President Patricia Solís and Deirdre Bishop accepting the Pan American Decoration on behalf of Paul Cooper.

Post- Assembly Action items for the USNS include:

- Increasing U.S. participation in PAIGH and raising awareness about scholarships, workshops, and Technical Assistance Project opportunities within the USNS community.
- Encouraging greater participation in the PAIGH Commissions and Technical Assistance Program.
- Building and documenting USNS history.
- Improving communication and coordination on geographic names at the national, regional, and global level.

Overall, USNS members found the General Assembly to be an enriching experience that provided valuable opportunities to collaborate with other PAIGH members.



Figure 8: Deirdre Bishop delivers a presentation on the UN-IGIF.

5TH PLENARY MEETING OF THE HIGH-LEVEL GROUP OF THE INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

February 2-6, 2025 – Jeddah, Kingdom of Saudi Arabia

Deirdre and Emily Carlson traveled to Saudi Arabia in February to attend the 5th Plenary Meeting of the HLG-IGIF, the UN-GGIM Expanded Bureau Meetings, and the 10th Plenary Meeting of the Regional Committee of United Nations on Global Geospatial Information Management for the Arab States (UN-GGIM: Arab States).

Deirdre, alongside Co-Chair Fernand Guy Isseri (Cameroon), led the 5th Plenary Meeting of the HLG-IGIF on February 2-3. The meeting focused on clarifying the roles and responsibilities of UN-IGIF stakeholder groups to enhance global coordination. These groups include the HLG-IGIF Working Groups

(Communications, Capacity Development, and Sustainable Funding), UN-GGIM Regional Committees, UN-GGIM Thematic Networks, UN-GGIM Secretariat, and the United Nations Global Geospatial Knowledge and Innovation Center (UN-GGKIC) in China. During the meeting, 26 HLG-IGIF priorities and corresponding responsibilities were determined and primarily assigned to the UN-GGIM Secretariat and the UN-GGKIC. The HLG-IGIF requested monthly progress updates from these parties.

Deirdre also attended meetings of the UN-GGIM's Expanded Bureau on February 3, where she received updates on the progress of the two existing United Nations Centers of Excellence—the Global Geodetic Center of Excellence in Bonn, Germany and the UN-GGKIC in Deqing, China. She was also briefed on the planned Global Geospatial Ecosystem Center of Excellence in Riyadh, Kingdom of Saudi Arabia, which was scheduled to open soon.



Figure 9: Co-Chairs of the HLG-IGIF Fernand Guy Isseri and Deirdre Bishop.

From February 4-6, Deirdre served as Head of the United States Delegation to the UN-GGIM, where she represented the U.S. during the UN-GGIM: Arab States meeting.



Figure 10: 5th Plenary Meeting of the HLG-IGIF attendees.

USNS ANNUAL MEETING

April 8-9, 2025 – Washington, DC

The 2025 PAIGH USNS Annual Meeting was held in person on April 8-9, 2025, in Washington, DC and was coordinated by the U.S. Census Bureau. This year's meeting was held at the Brigham Young University Barlow Education Center and saw a mixture of in-person and virtual attendees.



Figure 11: In-person attendees of the 2025 USNS Annual Meeting. From left: Lidia Lopez, Paul Riley, Evan Ward, Paul Cooper, Deirdre Bishop, Joy Pochatila, Sergio Rodriguez.

Remarks from the PAIGH Secretary General

The meeting opened with virtual remarks from PAIGH Secretary General Antonio Campuzano, who highlighted the organization's achievements over the past year. He expressed deep gratitude to the USNS for their unwavering support as PAIGH reestablished itself as a leader in scientific cooperation in the Americas. The USNS thanks Secretary General Campuzano and PAIGH President Patricia Solís for their outstanding leadership, and commends the significant expansion of scholarship offerings, PAIGH's continued financial health, and its growing international engagement.

Ethics in the Use of Geographic Information

Rosario Casanova, from the Universidad de la República Uruguay, presented an update on the Ethics in the Use of Geographic Information, a 2024 Technical Assistance Project submitted by the Uruguayan National Section and supported by the USNS. The project team, comprised of professionals from Argentina, Brazil, Chile, Panama, Uruguay, and Belgium, aims to develop general guidelines and supporting tools to facilitate the inclusion of the education of ethics in the use of geographic data in academic institutions and the geomatics community. The

project has completed Phase 1-3, which included team formation, planning, information collection, and diagnostic research, and is currently in Phase 4, which includes proposal development, discussion forums, creation of a glossary of terms related to ethics in geographic data use, recommendations for ethics instruction, conducting training workshops for trainers, and preparation of a final report.

GeoEduca de las Américas Web Application

Ramiro Pazmiño Orellana and Rosa Cuesta Molestina presented an educational web application developed by the Instituto Geográfico Militar of Ecuador called GeoEduca de las Américas. The application was designed as part of a 2025 Technical Assistance Project submitted by the



Figure 12: GeoEduca de las Américas logo.

Ecuadorian National Section and supported by the USNS. The purpose of the application is to provide open, interactive, and interdisciplinary geographic education content for students, teachers, and the public across the Americas. Platform features include country-specific information cards, thematic maps (e.g., geography, history, and natural hazards), educational games (e.g., capitals, symbols, monuments, and flags), and materials covering politics, environmental conditions, and more.

Federal Geographic Data Committee and the National Spatial Data Infrastructure

Joy Pochatila from the Federal Geographic Data Committee (FGDC) gave a presentation on the National Spatial Data Infrastructure (NSDI). The FGDC is a 32-member interagency committee responsible for leading the development and coordination of the NSDI and overseeing National Geospatial Data Assets (NGDA). Since 2018, the FGDC has served as the primary authority for developing, implementing, and reviewing geospatial data policies, practices, and standards. The NSDI provides a foundational framework of policies, standards, procedures,

data, and technology to support geospatial data sharing. The NGDA portfolio is comprised of over 150 datasets across 18 thematic categories (e.g., climate/weather, boundaries, and addresses). The FGDC maintains the GeoPlatform, which is a web-based application that ensures that NSDI data are findable, accessible, interoperable, and reusable, and hosts over 120,000 geospatial records. In October 2024, the FGDC released the 2025-2035 NSDI Strategic Plan, which envisions a seamlessly connected national geospatial ecosystem and focuses on enhanced collaboration, improved data security, and the modernization of spatial data infrastructure.

Pan American Decoration



Figure 13: Paul Cooper (left) accepting the Pan American Decoration from Deirdre Bishop (right).

During the 24th General Assembly of PAIGH, a resolution was adopted to establish the Pan American Decoration, intended to honor the outstanding careers, accomplishments, and contributions of PAIGH members. At the 25th General Assembly, the Pan American Decoration was given to USNS member Paul Cooper. Paul began his distinguished career in 1971 after

serving with the U.S. Army in the Far East. In 1977 he was assigned to Panama and became involved with PAIGH projects throughout the region. He went on to serve as Director of the Naval Oceanographic Office Middle East Europe Africa Regional Office (located in the United Kingdom) and Director of the Naval Oceanographic Office International Program. After transitioning to the private sector, Paul served as Vice President of CARIS USA and was elected President of the Hydrographic Society of America. He remained active in PAIGH, serving on the Cartography Commission and as Chairman of the PAIGH Committee on Institutional Strengthening and Technical Cooperation. He also represented PAIGH at

International Hydrographic Organization (IHO) meetings for Regional Hydrographic Commissions and the Inter Regional Coordination Committee. He also represented the U.S. on various IHO committees and delegations to International Hydrographic Conferences. He was instrumental in establishing an MOU between PAIGH and the IHO, as well as between PAIGH and the Nippon Foundation in support of the SEABED 2030 initiative. Paul has also served as USNS Vice President from 2014 to 2021. The USNS recognizes Paul's legacy and thanks him for his contributions.

Resources of the Leventhal Map and Education Center



Figure 14: Leventhal Center in Boston, MA.

Emily Bowe and Ian Spangler, from the Leventhal Map and Education Center at the Boston Public Library, gave a presentation on the geospatial resources available at the Center. During their presentation, they gave many examples of using maps to communicate a perspective or

argument through choices in design. As an example, they discussed a map from the 1943 Fortune magazine that used a polar projection to argue for U.S. involvement in World War II to show how much closer Europe is to the U.S. than is usually portrayed by the traditional Mercator projection. They also told meeting attendees about a new exhibition titled Trains of Independence, which examines why key revolutionary events happened in Boston through a geographic lens rather than focusing solely on famous individuals. The Center also runs digital exhibitions, hosts biweekly public map showings of historic maps, and conducts public presentations at branch libraries to engage the wider community in map and geography appreciation.

Emily and Ian also presented “Processing Place,” which detailed a project focused on urgently collecting, preserving, and sharing the early material and human history of computer cartography. Through interviews, artifact gathering, and oral histories, they highlighted overlooked contributors, hybrid manual-digital workflows, and the collaborative roots of Geographic Information Systems (GIS). Their exhibition showcases artifacts like early land use maps, digitizing tools, and media documenting hidden roles, especially by women. They emphasized that preserving both artifacts and personal stories is essential for a fuller history and called for broader engagement to continue to surface the human side of cartography.

What is Past is Prologue: Improving Regional Decision Making through Bayesian Risk Networks

Zenon Medina-Cetina from Texas A&M University presented on improving regional decision making through Bayesian Risk Networks. He explained traditional approaches to risk assessment have been traditionally represented with X-Y plots (e.g., hazard and risk) but can now be visualized through more complex graphs showing relationships between risks. His model introduces vulnerability to the traditional model, creating a three-dimensional view of risk. Combining expertise across fields can create complex risk models involving over 120 variables to better understand interconnected systems. An example of this is a model of COVID-19 vulnerabilities along the U.S.—Mexico border, which integrates public health, geopolitics, and misinformation concerns into one model to more accurately show risks. Bayesian model distributions can show best-case, expected, and worst-case scenarios, how close or far current conditions are from the worst-case outcome, and how updates and new data can refine predictions. They also allow researchers to tweak vulnerabilities, threat intensities, or impacts to see how different scenarios shift risk levels.

Extreme Heat

Patricia Solís from Arizona State University presented her research on extreme heat in Arizona and the disparate impacts seen in local communities. She began by

introducing the Census Bureau’s Community Resilience Estimates (CRE), an innovative national data product that now integrates environmental data and includes models for heat vulnerability and energy access (e.g., lack of air conditioning). The State of Arizona has adopted the CRE for their public health and environmental resource planning. She helped the Arizona Department of Health develop a new Social and Environmental Vulnerability Index that uses the CRE for heat data.

Additionally, Patricia shared her involvement with Arizona's response to extreme heat events. After Arizona declared a state of emergency during the record-breaking heat of 2023, the Governor’s Office of Resilience asked Patricia to create a report of recommendations for the state’s first Extreme Heat Preparedness Plan.

Her report led to several important outcomes including the establishment of the first state Chief Heat Officer in the U.S., a new mobile home law for better heat protection, and mobilization of 10 state agencies under the new heat plan. These efforts coincided with 2024 becoming an even hotter year than 2023, yet Maricopa County saw its first decrease in heat-related deaths in 10 years—though over 600 deaths still occurred, underlining that much work remains. Patricia concluded on a positive note, stressing that data-driven action and community collaboration can make a real difference in resilience planning.

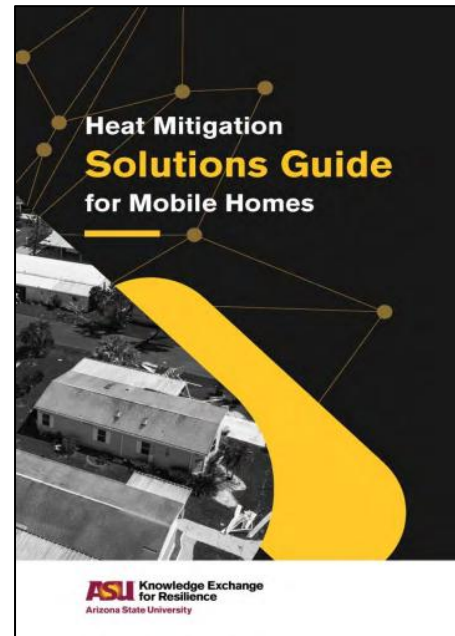


Figure 15: The cover of a guide developed by Patricia Solís that details strategies for heat resilience among mobile home owners in Arizona.

Advancing Interdisciplinary and Civic-Engaged Climate Studies and Research at the University of Colorado Denver

Ivan Ramirez gave an update on his work at the Civic Engagement and Climate Justice Think Lab at the University of Colorado Denver, where he has focused on building undergraduate and graduate research capacity in climate justice and civic engagement. He highlighted several student-led projects, including climate justice

case studies in Latin America, assessments of climate adaptation in Chile, and research on vulnerable populations in Colorado, Nigeria, and Sierra Leone. He also described the success of the first ever Community Engagement Café at the Association for American Geographers conference this year, a lively session connecting community-engaged scholars across disciplines. He shared news about the university's launch of a new Interdisciplinary Climate Change Studies program with three tracks: natural sciences, society, and policy, each emphasizing climate and environmental justice. Ivan reflected on the importance of international partnerships for climate and health research, sharing his long effort to build collaborations in Peru. He suggested that PAIGH National Sections could play a bigger role in helping connect researchers with local civic, academic, and disaster risk management sectors. He stressed the need for cross-sector discussions to improve dissemination and practical impact of research, especially using tools like interactive hazard mapping.

Geospatial Artificial Intelligence for Health Risk Prediction – from Ocean Plastic Pollution to Natural Disasters

Ajay Gupta, Co-Founder and Chief Executive Officer of HSR.health, emphasized the importance of leveraging geospatial technologies and AI to improve global healthcare outcomes without sacrificing economic opportunity. HSR.health focuses on predicting and mitigating health risks using GeoAI—combining geospatial data and AI—powered by proprietary and patented algorithms using authoritative datasets. Their platform helps organizations anticipate and respond to health risks and associated economic impacts like supply chain disruptions and workforce absenteeism. He highlighted two projects. First, the Poseidon Project tracks plastic pollution using satellite imagery, ocean current models, and population data. Next, the Disaster Risk Reduction Project uses real-time GeoAI analysis for events like hurricanes, floods, and wildfires, and develops health risk indices to predict healthcare facility impacts and at-risk populations, improving emergency response and resource allocation. Ajay also introduced their Generative AI system, which allows users to ask natural-language questions about geospatial health risks, produces actionable answers without requiring technical

expertise, and emphasizes accuracy, bias detection, and error prevention. He stressed that GeoAI is essential for making vast geospatial datasets actionable and encouraged the adoption of GeoAI to make a healthier and more resilient world.

GeoForce Update and Future Plans

Len Kne from the University of Minnesota, Him Mistry from New York University, Miriam Olivares from Yale University, and Miguel Félix Mata Rivera and Roberto Zagal, both from the Instituto Politécnico Nacional, provided an update on the activities of GeoForce. GeoForce, which was introduced at the 2024 USNS Annual Meeting, is a grassroots initiative focused on building geospatial support services in universities to strengthen spatial thinking and workforce development. Rather than teaching Geographic Information Science (GIS) directly, GeoForce focuses on creating infrastructure at universities to support spatial learning, research, and outreach through workshops, consultations, grant support, data awareness, and promoting spatial fluency beyond traditional coursework. Recently, the GeoForce team has participated in major geospatial forums at conferences, and led hands-on workshops in Mexico City to help institutions design their own geospatial support frameworks. At the annual meeting, Felix and Roberto highlighted two student projects. The first project developed affordable air quality sensors to monitor air pollution across Mexico City, particularly around industrial zones and airports. The second project created a device mounted on electric scooters to identify sidewalk

obstacles and hazards, combining different types of imaging with a citizen-science platform to crowdsource data with the goal of improving accessibility for people with disabilities.



Figure 16: From left, Miriam Olivares, Len Kne, and Him Mistry attending a conference in Mumbai, India.

Copies of all presentations from the USNS Annual Meeting can be found on the USNS website: <https://uspaigh.org>.

15TH SESSION OF UN-GGIM

August 3-8, 2025 – New York, NY

The 15th Session of UN-GGIM and associated side events took place August 3-8, 2025, at the United Nations Headquarters in New York, NY. Deirdre led the U.S. Delegation, which included representatives from various federal agencies, including the U.S. Census Bureau, the National Oceanic and Atmospheric Administration, the National Geospatial-



Figure 17: Members of the U.S. Delegation representing the Department of Commerce, Defense, Interior, Transportation, and the National Aeronautics and Space Administration.

Intelligence, the U.S. Geological Survey, the National Aeronautics and Space Administration, and the U.S. Department of Transportation. The Session brought together 362 representatives from 80 Member States and 68 Observer Organizations, reflecting the broad international engagement in advancing global geospatial information management.

During the Session, Deirdre was re-elected Co-Chair of the full UN-GGIM Committee of Experts and presided over the formal proceedings. In her role as Head of the U.S. Delegation, she delivered seven interventions on behalf of the United States, addressing a range of critical topics:

- Advancement and implementation of the UN-IGIF.

- Strengthening collaboration among Member States, Regional Committees, and Thematic Networks.
- Integration of geospatial, statistical, and other related information, such as earth observations.
- The use of geospatial information for sustainable development and climate resilience, marine geospatial information, geodesy and a global geodetic reference frame.
- Development and adoption of standards.
- Collaboration with the UNGEGN.

As part of the extensive week of activities, Deirdre participated in several high-level side events:

- On August 3, Deirdre participated in a full-day meeting of the International Advisory Committee for the UN-GGKIC focused on aligning the UN-GGKIC Annual Work Plan with the HLG-IGIF priority activities. The UN-GGKIC has committed to carrying forward the work of the HLG-IGIF, by developing a comprehensive communications strategy, producing outreach materials to increase awareness of the UN-IGIF, and conduct of a global survey to assess its implementation and use.
- As Co-Chair of the HLG-IGIF, Deirdre also convened a meeting of group members to share accomplishments of the past year and review future work plans. The 26 priority activities established during the 5th Plenary Meeting will be streamlined to eight priority activities, with the HLG-IGIF returning to a role of leadership, coordination, and oversight, while the UN-GGKIC will take responsibility for the implementation of the work to be done.
- Deirdre also participated in a Forum on Geospatial Leadership, presenting the importance of developing strong national geospatial leadership. Her remarks highlighted the need for leaders who can effectively lead change, lead people, secure and manage financial and technical resources, build coalitions inside and outside of government, and deliver impactful results.

Additional engagements included active participation in a UN-GGIM: Americas side event, Thematic Network side event, Interregional Meeting of UN-GGIM Committees, the launch of the Geospatial World Forum 2026, and meetings of the UN-GGIM Bureau and Expanded Bureau.



Figure 18: Deirdre serving as Co-Chair of the 15th Session of the UN-GGIM.

GEOGOV SUMMIT 2025

September 8-10, 2025 – Dulles, VA

Several members of the USNS attended the GeoGov Summit 2025 in Dulles, VA from September 8-10, 2025. The event brought together spatial leaders from tribal, state, federal, and local governments, private industry, advocacy groups, and academia. The Summit’s theme, “Shaping the Future of Our National Geospatial Ecosystem – Together Through Partnership, Efficiency, Innovation, and Impact,” guided a series of high-level discussions. Sessions included “Navigating the Changing Public-Private Sector Geospatial Landscape,” and “Why Geodesy

Matters for National Geospatial Ecosystem?” Others panel topics included operationalizing the NSDI, overcoming barriers to data aggregation, integration, and access, building a whole-of-nation governance approach, capacity development to strengthen national geospatial ecosystems, integrating emerging technologies and new talent, harnessing GeoAI and spatial computing, and assessing nationwide geospatial data coverages. This event highlighted the USNS’s continued leadership and valuable insights in shaping the future of the global geospatial industry.



Figure 19: A panel at the GeoGov Summit, including USNS member Mike Tischler (third from the right).

26TH GENERAL ASSEMBLY OF PAIGH

October 13-17, 2025 – Tegucigalpa, Honduras

USNS members plan to attend the 26th General Assembly, to be held October 13-17, 2025, in Tegucigalpa, Honduras.



COMMISSION ACTIVITIES

CARTOGRAPHY COMMISSION

Eric van Praag

USNS Cartography Commission Representative

The mission of the Cartography Commission is to promote the exchange of technical knowledge in Cartography, develop collaborative partnerships among Member States, and strengthen cooperation between PAIGH and other multi-national institutions. During the latter half of 2024 and the first half of 2025 members of the USNS Cartography Commission supported activities in the Americas aimed at developing geospatial applications, increasing spatial data sharing, and improving collaboration among geospatial providers in the region. Below is a summary of these key activities and ongoing work.

The initiatives described below represent only a portion of the extensive work being carried out by members of the PAIGH USNS Cartography Commission. In this year's report—our most comprehensive to date—we have sought to highlight both current efforts and the long-standing contributions of U.S. experts to cartographic and geographic advancement in the Americas.

Integrated Map of North America

The Regional Map of the Americas is a collaborative effort of the national mapping organizations of the Americas and is supported by stakeholders such as PAIGH, the Spanish National Center for Geographic Information, the U.S. Geological Survey (USGS), and the Latin American Development Bank (CAF).

This initiative is producing a digital geographic database that covers the following topographic themes: Administrative Boundaries, Hydrography, Villages, Roads,

Morphology, and others (e.g., Points of Interest) using official geographic data provided by PAIGH member countries.

The work was started in 2013 with funding provided by PAIGH and CAF, and the South American and Central American components of the map were completed in 2020.

The USGS has been supporting the U.S. contribution to the Integrated Map of North America (IMNA) since 2019. This support entails the production of authoritative topographic data at 1:250,000 scale for integration into a web-based service of topographic data for the U.S., Mexico, and Canada. After the 2019 project kickoff workshop in Ottawa, Canada, production of the U.S. data was delayed due to low staffing levels and delays in development of cartographic generalization procedures. USGS topographic data is produced at 1:24,000-scale and so cannot be used for IMNA until generalization is complete.

In 2025, leadership of the USGS team changed, and work restarted on the U.S. contribution. Some feature classes have been completed and integrated (edge-matched) with existing Canada and Mexico IMNA data. Other data sets are still waiting on generalization but are expected to be complete within Fiscal Year 2026 which runs up to October 2026.

Completed and integrated data sets, organized by theme:

- Transportation (Roads, Railroads, Waterways, Ports).
- Boundaries (States, Counties, Minor Civil Divisions).
- Hydrography (Glaciers, Wetlands).
- Settlements (Populated Places, Urban Sprawl).
- Land Morphology (Spot Elevations).

Data sets awaiting generalization and development, organized by theme:

- Hydrography (Rivers, Waterbodies, Coastlines).
- Landforms (Place Name Points).
- Land Morphology (Islands).

Natural Disaster Risk Portal for Latin America

In August 2024, Esri and PAIGH completed and signed a new MOU. The purpose of this new MOU is to provide a framework for the exchange of geographic, cartographic, and scientific expertise, leverage mechanisms for sharing spatial data and services, and offer training to hone the GIS skills of PAIGH members and stakeholders.

This MOU is the product of extensive consultations between Esri, the PAIGH Secretary General, and the heads of the PAIGH Cartography and Geography Commissions.

The MOU includes a 5-year donation of an ArcGIS Online organizational account - as previously mentioned, as well as limited technical support from Spanish-speaker subject matter experts from Esri.

Under the MOU guidance, the presidents of the PAIGH Cartography and Geography commissions and Esri have been working on the development of a project proposal for the development of a Regional Latin American Portal for Natural Disaster Risk Analysis. Thus far this group has developed a concept note sketching the general project scope and associated pilot project. The plan is to present this concept note to a selected group of SMEs—to be identified by members of the commissions—to validate the general approach, refine the pilot project scope, and identify stakeholders and funding required to either implement the pilot project or work on a full-fledged project proposal.

The Cartography Commission welcomed two new members this year: Emily Bowe and Ian Spangler, both from the Leventhal Map and Education Center at Boston Public Library.

Individual member accomplishments are listed below:

Roger L Payne

Roger L. Payne, a member of the USNS since 1989 and former Vice President (2004–2006), has made extraordinary contributions to the field of geographic names and toponymy, particularly in Latin America. His dedication over more than three decades has had a global impact on naming standards, education, and international cooperation. Roger served on the Committee of Geographical Names/Geographic Names Committee from 1989-2023, serving as Chairman from 1993-2023. He was the Principal Developer of the PAIGH Geographical Names Training Course, an instructor from 1989-1992, and Head Instructor 1993-2023. He served as PAIGH Liaison to the UNGEGN from 1993-2023 and was also a member of the U.S. Delegation to UNGEGN 1987-2006, serving as Head of the U.S. Delegation 1991, and 1993-2006. In 2001, he was a Delegate to the Seventh United Nations Conference for the Americas.

Outside of PAIGH, Roger has had a distinguished career both in the public and private sectors. From 1979-2006, he was Chief of the Geographic Names Information System, the official geographic name repository of the U.S. maintained by USGS. He was the Executive Secretary of the U.S. Board on Geographic Names from 1989-2006. In 1989, he served as President of the American Name Society.

He retired in 2006 but was rehired by USGS to provide database design support and serve as the Secretary of the Advisory Committee on Antarctic Names (ACAN), a Committee of the U.S. Board on Geographic Names. He retired again in 2012, but to this day he volunteers as Secretary of ACAN. He was an adjunct professor at seven colleges and universities from 1969-2013.

Roger's work has advanced geographic naming systems throughout the Western Hemisphere and beyond, setting international standards that continue to benefit the geospatial community worldwide.

Eric van Praag

Eric is a Senior Project Manager at Esri, working in the Water Resources team within the Natural Resources Department. His work revolves around topics such as flood risk analysis, flood forecasting, and flood monitoring.

He has supported GIS and Spatial Data Infrastructure projects in Latin America for more than 30 years, including:

- Coordination of the South American Geospatial Network Program (GeoSUR), a Latin American Spatial Data Infrastructure Initiative led by The Latin American Development Bank, for eight years.
- Coordination of the USGS GeoCAFE project (a research and coordination network for accelerating climate and health research) in Costa Rica, Guatemala, and the Dominican Republic for two years.
- Project management support for the USGS Central America Mitch Project - GIS Clearinghouse Component for two years.
- Consultant support for the InterAmerican Biodiversity Information Network sponsored by the OAS for two years.
- Program management support to the Venezuelan Chapter of Global Forest Watch operated by the World Resources Institute, for two years.
- Consultant support to the Wider Caribbean Environmental Information Network under the supervision of the United Nations Environmental Program Caribbean Environment Program for two years.

He was the South American representative and the Chair of the Technical Committee of the Global Spatial Data Infrastructure Association and a member of the Open Geospatial Consortium (OGC) Global Advisory Board.

He has supported PAIGH in different capacities over the last 25 years and has been the USNS Representative to the Cartography Commission for the last eight years.

Eric's work has strengthened Latin America's geospatial capacity, fostered regional collaboration and supported sustainable development through cutting-edge data and mapping initiatives.

GEOGRAPHY COMMISSION

David Salisbury

USNS Geography Commission Representative

This year, the USNS Geography Commission welcomed three new members: Len Kne (University of Minnesota), Him Mistry (New York University), Miriam Olivares (Yale University), and Zenon Medina-Cetina. Commission members have been working hard this year, with individual member accomplishments listed below:

Len Kne

At the PAIGH USNS Annual Meeting in April, Len, accompanied by Him Mistry, Miriam Olivares, Miguel Félix Mata Rivera, and Roberto Zagal, presented on [GeoForce](#), highlighting the series of workshops conducted at GIS LATAM as well as additional workshops in India. Beyond this work, Len has been collaborating on an initiative for capacity development to strengthen national geospatial ecosystems, which is closely aligned with the Geospatial Knowledge Infrastructure initiative led by Geospatial World.

Paul Riley

Paul is a Geographer supporting the Geography Division of the U.S. Census Bureau, where he supports both national and international geospatial initiatives. Domestically, he helps advance engagement activities such as the GeoGov Summit and supports the implementation of the NSDI. Internationally, he serves as a subject matter expert and member of the U.S. Delegation to the UN-GGIM, providing support to the HLG-IGIF, its working groups, and regional activities through UN-GGIM: Americas.

This year, he supported U.S. participation in major forums, including the 11th Session of UN-GGIM: Americas, the 7th High-Level Forum on UN-GGIM, the 25th General Assembly of PAIGH, and the 15th Session of UN-GGIM, with plans to

attend the 26th General Assembly of PAIGH in Honduras and the 12th Session of UN-GGIM in November. He also serves as USNS Executive Secretary, where he works with leadership and members to strengthen U.S. engagement and hemispheric cooperation.

Oswaldo Muñiz Solari

Oswaldo has been working on population analysis and online geography education for university students of the Pan American world at Texas State University.

Diana Sinton

Diana's primary activity this year was continuing to serve as the Project Manager for the NSF-funded [*Institute for Geospatial Understanding through an Integrated Discovery Environment \(I-GUIDE\)*](#). I-GUIDE supports open science research activities through its platform, enabling easier access to high-performance spatial computing. Highlights of the year included an inaugural Spatial AI Challenge and an annual week-long Summer School, at which 26 Ph.D. students worked in teams on AI applications for extreme events and disaster resilience. Separately, she served as the Managing Editor of the [*Coalition of Geospatial Organization's \(COGO\) 2024 NSDI Assessment*](#). COGO is a U.S. based group of 14 national professional societies, trade associations, and membership organizations. She continues to serve as the Project Director for the University Consortium for Geographic Information Science's [*Geographic Information Science & Technology Body of Knowledge*](#). This open educational resource provides easy access to a wide range of geospatial topics. For example, PAIGH is referenced in this entry on [*Geospatial Organizations and Programs, Internationally-based or with a Non-US Focus*](#). One of her publications this year was [*Moving CyberGIS education forward: Knowing what matters and how it is decided*](#).

Andrew Sluyter

Andrew has been working to complete a book project funded as an Andrew Carnegie Fellow on higher education and slavery. The scope is focused on what is now the U.S. South, but the project's historical dimensions extend from the present back to when the entire Gulf South was a Spanish colony, from Texas to Florida.

Charlotte Smith

Charlotte continued work with the colleagues at the Jesuit University of Guadalajara, ITESO, aimed at exploring relationships between occupational, environmental, behavioral or dietary factors and diarrheal and/or kidney disease ([see related article](#)). In addition to follow-up studies in collaboration with university faculty and students on primary drinking water source water quality, her team also conducted capacity building workshops on data collection with a GIS-enabled mobile app and spatial data visualization for faculty and students.

G E O P H Y S I C S C O M M I S S I O N

Lidia Lopez

USNS Geophysics Commission Representative

A significant number of USNS Geophysics Committee members work for National Geospatial Intelligence Agency (NGA) and supported the following projects this year:

- In 2025, NGA Office of Geomatics staff continued to support the international community through the [NGA Meter Loan Program \(METEOR\)](#). The METEOR program promotes international cooperation and strengthens multinational ties with the U.S. For over 50 years, NGA has put geophysical and geodetic equipment in the hands of academia, industry, and

governmental institutions all over the world to help countries establish local geodetic control and advance their own internal infrastructure.

- NGA Office of Geomatics staff have published a new publicly available article about the history of the World Geodetic System (WGS) 1984 coordinate system, titled, “[Thirty years of maintaining WGS 84 with \[Global Positioning Satellite Technology \(GPS\)\]](#).” For more information about the article, see [NGA’s announcement](#) about the article or open the [Institute of Navigation \(ION\) article](#), specifically pages 23-24.

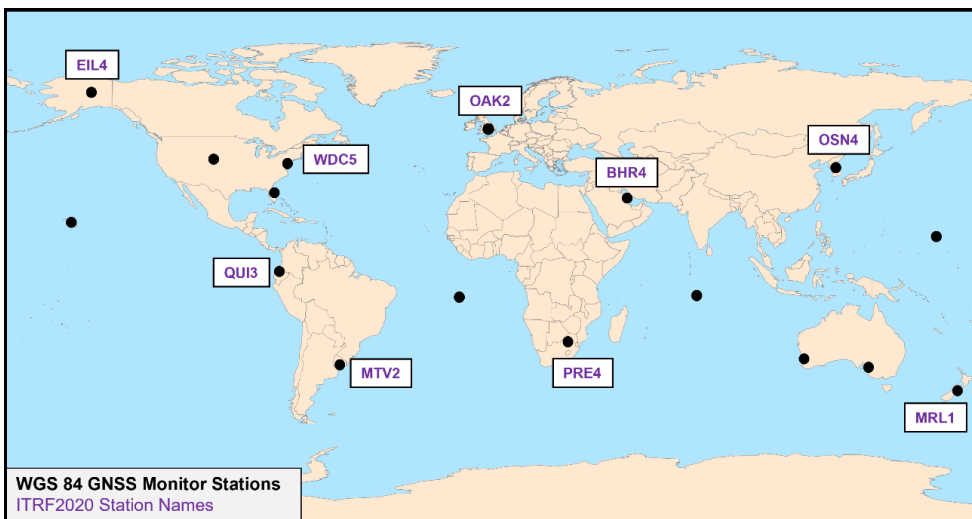


Figure 21: Map of the WGS 84 Global Navigation Satellite System (GNSS) monitoring stations featured in the ION article.



Figure 20: Real world applications of the NGA's METEOR program (photo credit: NGA).

HISTORY COMMISSION

Erick D. Langer

USNS History Commission Representative

The History Commission is preparing for the upcoming PAIGH Centennial and recouping the history of the origins of the USNS. Executive Secretary Paul Riley

and Erick Langer went to the National Archives located in Suitland, MD to examine the documentation that the Anthropology Archives had on the origins of the USNS. The main source of historical materials is the Arch A. Gerlach papers that were donated to the National Archives. They include printed sources as well as handwritten notes. In addition to the Gerlach papers, the Library of Congress has multiple sources for the history of PAIGH as well. Paul and Erick plan to return to the Suitland Archives and the Library of Congress to continue the research on the origins of PAIGH and the USNS. They are also interviewing former members of the USNS for more information that may not appear in surviving documents. The History Commission thanks Paul, who provided the impetus for this effort and has done excellent work summarizing the findings so far.

There are three reasons for the research on the USNS: to assist Deirdre in delineating the importance of the U.S. in the history of PAIGH, to write a short history of the USNS, and to support the PAIGH History Commission leaders in writing a history of the organization for the upcoming Centennial.

In other matters, the Commission is organizing to get more members so that the History Commission can be better presented in the USNS.

Beyond this, the members of the History Commission have been active, with individual member accomplishments listed below:

Thomas Fields

Thomas, working with Embry-Riddle Aeronautical University, has been diligently working on his book manuscript, tentatively titled “Andean Pivot: Washington, Havana, and the Che Guevara Rebellion.” It has been sent out to readers for press evaluation.

Erick D. Langer

Erick, working with Georgetown University, has been busy this year. He published, as co-author, “Benefits for Winegrowers of Diversified Farming in the High Valleys

of Southern Bolivia,” Pablo Oliva Oller, Martín Notaro, Erick Langer, and Christian Gary, *Agroecology and Sustainable Food Systems* (May 2025), 1-21, <https://doi.org/10.1080/21683565.2025.2510353>.

He also co-authored two book chapters with his undergraduate research assistant, Christina Rosamond. They are, “Mujeres de frontera en la Cordillera chiriguana a mediados de siglo XIX,” *Mujeres del Oriente: Amazonía, Chiquitanía y Chaco, siglos XVIII-XX*, Isabelle Combès and Lorena Córdoba, eds. (Cochabamba: Scripta Autochtona, 2024), 137-152; as well as the single-authored “La Provincia de Cinti: Declive económico y cambio social en la época liberal: 1880-1930,” *Historia, identidad y memoria de una región del sur de Bolivia: Los Cintis, Chuquisaca*, Claudia Rivera and Esther Aillón, comps. (La Paz: Plural, 2024), 345-390.

Alongside co-editor Margarita Robertson, he finished a book on the collected writings of Francis Burdett O’Connor, an Irish aristocrat who fought during the independence wars in South America from 1819-1825 and was an important figure in various Bolivian governments. He settled in Tarija, Bolivia, acquiring large estates on the eastern frontier. Most of the book, in two volumes (about 1,200 pages), contains his diaries. Erick wrote an introduction to the volumes and did most of the editor’s notes, which provide information to the reader about places, events, and personages mentioned in the writings. The volumes will appear in Plural Editores, in Bolivia. The book is tentatively titled: “En busca de una Patria”: *Los escritos de Francisco Burdett O’Connor (1823-1871)*.

Erick continued in his role as news analyst in “Club de Prensa” in NTN24, the Colombian all-news network, as well as giving various lecture/workshops at the Foreign Service Institute in Arlington, Virginia and appearing in Voice of America and Telemundo for news analysis. He was Chair and Discussant for the “Politicizing Religious Dissent in the Andes” session at the Latin American Studies Association meeting in San Francisco, CA in May 2025. Lastly, he was the co-organizer and co-chair of the “Actores y prácticas en los márgenes territoriales en el proceso de construcción del estado boliviano, siglo XIX” session of the Bolivian Studies Association, held in Sucre, Bolivia in July 2025. He also gave a paper, titled “La frontera chaqueña de Tarija durante la republica temprana: el establecimiento de

los puestos fronterizos en la ‘frontera chiriguana’ en los años 1830 por Francisco Burdett O’Connor.”

Erick is currently leading a study that analyzes inflation in the interior of South America over the nineteenth century, with a team of (now former) Master’s students in Latin American Studies at Georgetown. This two-year long project will help show how much inflation existed away from port cities such as Lima or Buenos Aires. The data comes from price data at the Franciscan convent in Tarija, Bolivia.

James Siekmeier

James, working with the University of West Virginia, has been working on an article of the Chile Declassification Project, which lasted from 1998-2000. It was a special declassification initiative of the U.S. government to provide information on U.S. policy towards Chile from 1969-1991. The purpose was to provide the Chilean people information on U.S. support for the Pinochet regime, which resulted in many human-rights abuses. He submitted it to the *Mid-Atlantic Review of Latin American Studies* for publication, a peer-reviewed journal sponsored by the Mid-Atlantic Council of Latin Americanists.

James is also working on a book manuscript tentatively titled, “Arc of Crisis in the U.S.: Anti-Drug Efforts in the Andes from 1960-2000.” This book will explore arguably one of the most significant policy failures of the late 20th century, the U.S. attempt to suppress production of drugs from Latin America, and to interdict shipment of such drugs. It will also explore how non-U.S. actors worked with the U.S. in the “war on drugs.” It examines how the Andean nations showed historical agency in the drug war by attempting to channel and mold it in directions favorable to their interests.



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