

Here is a link with the reporting requirements and deadlines for all.
<https://www.transportation.gov/grants/smart/grants-management>

1. **Lead Applicant:** Three Affiliated Tribes of the Fort Berthold Reservation
2. **Name of Filer:** Thomasine Heitkamp
3. **Email address of Filer:** thomasine.heitkamp@und.edu
4. **Enter the Federal Award Identification Number (FAIN):** SMARTFY22N1P1G38
5. **Reporting Period End Date:** April 30, 2025

6. Overall Status

Provide an overall status of the project's scope, schedule, and budget.

The Three Affiliated Tribes (TAT) requested and received a **no-cost extension this quarter**. The **project's end date is June 30, 2025**, with the original end date of Feb 15, 2025. **No cost overruns have occurred. The PI at the University of North Dakota (UND) meets weekly with the Director of Planning and Economic Development Coordinator at MHA Nation**, with frequent correspondence and discussion to resolve questions about invoices and finances. As the lead partner, UND works collaboratively with MHA Nation to extend contracts during the no-cost extension period from February 16, 2025, to June 30, 2025. The project scope is generally on schedule, with delays only in the implementation component of the project. The MHA Drone Team continues to work within the established structure of three committees - workforce development, assessment, use/case, and implementation.

To support the project's aims of advancing workforce development, the MHA Drone Team offered **Drones in the Schools** at White Shield and Twin Buttes, serving over 100 youth with positive local media. This interests youth in aeronautics with an overview of safety and hands-on experience. The project completed a two-day FEMA training for emergency responders at MHA Nation entitled Uncrewed Aircraft Systems and Data Management.

The Assessment/Use Case Committee has authored a report entitled *Acceptability of Drones for Medical Use Cases on Tribal Lands*. Findings from this study were presented at the March MHA Drone Advisory Board Meeting. Feedback from the group was provided and implemented in the report. Before the distribution of the survey questions in Qualtrics to a host of residents across these Tribal lands, UND IRB and MHA Nation approval were secured. The Committee has **completed a literature review of over 100 articles** on the best practices in using drones for delivery, with a focus on medical delivery. The manuscripts are available to the MHA Drone team on a group TEAMS page.

The project continues to **host MHA Drone Advisory Committee meetings** to continue the engagement of key stakeholders. Community engagement has occurred in collaboration with the PI at NHS College, the Marketing Specialists, and the Program Manager to ensure the coordination of press releases regarding events and meetings, including media and marketing of workforce materials, this quarter.

The implementation committee meets bi-weekly. They continue to support **programmatic insight and operational support** to build on the successful proof-of-concept flights conducted in September 2025. This includes ensuring an efficient operational framework, identifying suitable flight corridors, and strict adherence to regulations and safety protocols.

7. Significant Activities and Accomplishments

Highlight key activities, accomplishments, and issues during the previous quarter. Report any meetings, audits, and other reviews, design packages submitted, advertisements, awards, construction submittals, construction completion milestones, submittals related to any applicable Recovery Act requirements, media or Congressional inquiries, value engineering/constructability reviews, and other items of significance.

Media this quarter for the MHA Drone Project includes: (1) *North Dakota Living: High Flying Medicine: Tribal College Explores Drone Technology and Training*, February 4, 2025. [High Flying Medicine MHA](#) (2) *MHA Times Dones Descend on White Shield and Twin Buttes Schools*. (3) **NHS College web page for the MHA Drone Project.** <https://nhsc.edu/community/drone-project/>. (4) The acceptance of a concept publication for discussion of workforce development by the NHS College and UND in **The Conversation**.

Social media is distributed through the NHS College, with live-stream demonstrations and interviews designed to educate the community, and hosted on Facebook Live. **The findings for the assessment survey indicate that familiarity with the project is associated with higher levels of support for the use of drones for specific use cases.** The project web page hosted by the NHS College is available for accessing materials to educate the community. A commitment exists to build on this work with the potential of Stage 2 funding, with the MHA Nation Business Council passing a resolution, number 24:312-FWF, providing support for an application for Stage 2 funding.

The support for future workforce plans continues with a new program entitled “**teach the teacher**” training program, with High School and Tribal College teacher recruitment underway to support attendance at a pre-training on Part 107 at NHS College on June 3 and 4, 2025. Final arrangements and the agenda for the **Third Drone Camp** on June 3, 2025, in collaboration with the Boys and Girls Club of TAT, will be distributed next quarter. **Final approval for a nine-credit certification program at the Tribal College was secured**, with publicity to be developed and distributed next quarter. Plans have been finalized to host a **final Stage 1 in-person meeting for Advisory Board members**, Tribal Leaders, and Community Members in New Town, ND, on June 2, 2025. At that meeting, the survey findings will be shared with the broader community, with plans to support a submission for Stage 2 funding and examine future sustainability efforts.

We continue refining the economic analysis through the generation of alternative scenarios. These look at the consequences of alternatives in the implementation efforts. This includes alternatives to current radar networks, different business models, and factors such as labor force training.

Labor force is one of the most variable aspects and therefore represents the most alternatives. Attracting, training, and retaining labor force is an enormous challenge, as in many industries and regions of the country. As a result it requires significant attention.

8. Unresolved and Significant Issues

Describe any highly significant or sensitive issues requiring action and direction to resolve. Provide a progress update on issues previously reported. Include administrative items and outstanding issues that could have a significant or adverse effect on the project's scope, schedule, or budget, and for each item or issue, provide a status, responsible person(s), and due dates. Be sure to address progress towards compliance and issues related to the National Environmental Policy Act (NEPA), the Build America Buy America Act, and the high labor standards prioritized in Executive Order 14052, "Implementation of the Infrastructure Investments and Jobs Act." Please note: To request any significant scope or budget changes, please contact your Grants Management Specialist.

A no-cost extension was secured until June 30, 2025. The team has reviewed the current project budget, timelines, and anticipated events and will complete the activities identified in the no-cost extension by June 30, 2025. However, delays and additional costs have occurred due to weather restrictions, cross-functional engagements, and the final executed agreement with industry partners during the no-cost extension period. The project team has identified the need for more planning regarding infrastructure analysis in takeoff and landing zones, and tying into communication and ground radar infrastructure is needed. Of course, the challenge of fulfilling the obligation of the revised final reporting structure given the work of this effort is in a Tribal Nation whose land was flooded by the US Army Corps of Engineers.

The DOT SMART team has helped MHA Nation secure access to Delphi, which was removed in January. This has delayed reimbursement to UND. However, a plan is underway to correct this issue with the able assistance from DOT staff.

9. What are the top ten milestones for your project? For each milestone, please include the planned completion date and the actual completion date, where applicable.

1. Delineation of resource requirements (coverage area/radar systems needed for detect and avoid) working collaboratively with the Tribal Council and their representatives. The MHA team will continue assessing Stage 2 resource requirements for the remainder of the grant period, accessing data secured from the assessment use case committee and findings from the data gathered following the use case, June 30, 2025.
2. Completion and final approval by the MHA Nation Tribal Business Council for public submission of the research findings entitled: *Acceptability of Drones for Medical Use Cases on Tribal Lands* on behalf of the MHA Drones: Planning and Protocol Development Project (January 1, 2025, to June 30, 2025).
3. Identification of infrastructure locations (launch and recovery by Vantis). A list of anticipated physical infrastructure, including candidate locations for physical infrastructure installation (January 1, 2024 – June 15, 2025).
4. Radar mapping of expected surveillance coverage at designated locations (January 1, 2024 – June 15, 2025).

5. Identify surveillance sensors and provide an implementation plan and associated costs for access and sustainment for communications and connection to the Vantis Cloud Services January 1, 2024 – June 15, 2025).
Economic Cost/Benefit/Economic Feasibility Analysis of Use Cases incorporating Assessment of Community Needs (January 1, 2024 – June 30, 2025)
6. Incorporation of DOT feedback based on their review of the January 30, 2025, quarterly report and the August 15, 2025, yearly implementation report. Project end report due October 30, 2025.
7. Workforce Development Plans including aeronautics articulation agreements, drone camps, drones in schools, and implementation of training programs (August 15, 2023 – June 30, 2025).
8. Establishing government-to-government relationships (August 15, 2023 – June 15, 2025). Ongoing with high levels of community enthusiasm and engagement.
9. Discussion of preparation and submission of the Stage 2 SMART proposal based on data gleaned in Stage 1 and use cases and needs identified. (upon NOFO availability).

10. Future Significant Activities: What significant activities are you planning in the next reporting period?

- **Certification Program Marketing Tasks:** Marketing materials are being developed by UND in collaboration with NHS College and will be distributed in support of the UAS Certification program to be offered at NHS College. This content will be shared with the segment leaders and high schools to assist in the recruitment of trainees.
- **Offer Part 107 Certification Training** for New Town High School in coordination with the School Superintendent and at NHS College.
- **Drone Camp at Earth Lodge Village** to be coordinated and offered by UND/RIAS/ Aerospace/NHS College. Lessons learned will be incorporated in future drone camps with anticipated efforts for sustainability.
- **Provide a “Train the Trainer” program** for invaluable, sustainable outreach capability for schools and young adult camps, along with aiding first responders. An MHA member will assist in providing the training needed for curriculum development and the technical skills training required to fly UASs capable of coding, GIS collection, videography, and other various data and sensor collection methods through the remainder of the NCE.
- **Testify before the MHA Nation Tribal Council to request the release of the assessment survey findings.** Staff hope to share the findings to guide other Tribal communities interested in beginning a drone program on Tribal lands.
- **Cost/Benefit analysis of alternative scenarios** for UAS delivery. Look at alternative data sources to determine the best cost estimates for various occupations and other costs to provide as accurate an estimate as possible. Examine the cost of using radar with a menu of options for the Tribal Nation.
- **Offer in-person MHA Drone Advisory Board** meetings at NHS College to ensure continued engagement and visits with staff at the Emergency Response Center and input and support for the Stage 2 funding request.
- **Branding for the final report and materials to be distributed broadly** on the web page and Facebook page.

- **Continue engagement with Elbowoods Memorial Health Center** to identify needs for medical delivery and expectations.
- **Building on Aims of System Implementation and Data Management. Collaborate to ensure all data is shared and managed properly for current and future growth.** The number of team members who attended the recent training hosted by DOT will follow the instructions.
- **Expansion of Radar Coverage Analysis for Additional Use Cases:** Expand the radar coverage analysis that applies to the leading medical delivery use case to include additional use cases identified on this project through community engagement.
- **Firm up Takeoff/Recovery Site Plan:** Develop a takeoff/recovery plan for UAS operating at MHA in conjunction with the radar location analysis for the primary use case and additional use cases. Identify locations and required infrastructure.