This page describes a data management plan written for the United States Department of Transportation using the DMP Tool. You can access this infomation as json here.

DOT SMART Grant MHA Nation Drone Project: Planning and Protocol Development

Contributors to this project

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Project details

Research domain: Other engineering and technologies
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Project End: 14 Feb 2025
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Ethical issues related to data that this DMP describes? unknown

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When connecting to this DMP to related project outputs (such as datasets) use the ID:
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Funding status and sources for this project

Status: Planned
Funder: United States Department of Transportation
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Grant: SMARTFY22N1P1G38 I

Project description

The Project will build partnerships with tribal, public, private, academic, industry, and non-profit organizations to address historical inequity of lack of access to goods and services and safety. Planning and team development will occur to support the use of drones (uncrewed aircraft) through infrastructure development. Planning activities include conducting a needs assessment and economic feasibility plan, expanding a skilled and diverse workforce, extending the ability to fly beyond visual line of sight, and offering services for key use cases. The focus is on ensuring safety and advancing lessons learned that are tailored to our tribal community.

Planned outputs

MHA Nation Drone Project: Planning and Protocol Development

The MHA Drone Project: Planning and Protocol Development Project Team developed a comprehensive plan for the use of drones to serve the Tribal members of the Three Affiliated Tribes (TAT) of the Fort Berthold Reservation (otherwise known as the Mandan Hidatsa

Arikara (MHA) Nation) to increase access to medical care and equipment, and potentially other use cases with opportunities for application for Stage 2 funding.

The Fort Berthold Reservation, a federally recognized Indian Tribe, is in north-central North Dakota (ND), within a rural, rugged landscape with heavy oil production, rough roads, and unforgiving weather. The goals and objectives identified in the proposal were: (1) identifying additional use cases, which included completion of two surveys of stakeholder needs and perceptions and a summary report with the findings of six listening sessions that were shared broadly with key Tribal stakeholders; (2) developing a blueprint for a safe, efficient, and scalable network for use of drones on our Tribal lands, which was accomplished by conducting a beyond visual line of sight (BVLOS) demonstration of delivery of medication that provided the opportunity to gather gata to monitor the airspace system; (3) development and implementation of a robust workforce engagement plan, by finalizing an aeronautics articulation agreement between two educational grant partners with the primarily online program to begin in August 2025, offering three Drone Camps in 2023/2024/ 2025, and teaching over 200 youth at remote MHA Nation schools through a Drones in the Schools effort; (4) ensuring comprehensive community engagement and partnerships to support government to government relationships, by assembling and hosting monthly MHA Drone Advisory Board to guide efforts and testifying before the MHA Tribal Business Council to secure required resolutions including a corridor for drone delivery between two remote

communities; and (5) exploring the economic feasibility of drone use at-scale by completing a comprehensive economic analysis of costs and benefits.

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