



**FARGO
MOORHEAD**
ECONOMIC DEVELOPMENT

Autonomous Systems & UAS

Targeted Growth Sector

FOREFRONT SINCE 2005

North Dakota has been at the forefront of the Autonomous Systems and Unmanned (Uncrewed) Aircraft Systems (UAS) industries since 2005 when the Grand Forks Air Force Base was realigned from a KC-135 tanker mission to a UAS mission. Since that time, the state has invested heavily in infrastructure, education, and capabilities to position the state as the premier global destination for UAS research, testing, and technology development.



PREMIER UAS DESTINATION

The progress that has been made in building a premier UAS ecosystem has caused state leaders and economic developers to start expanding their attention to also include broader opportunities in autonomous systems that are adjacent or complementary to the UAS industry.

North Dakota is one of only three states in the nation that has three important designations to fly and test a variety of unmanned aircraft missions and functions in partnership with the FAA and NASA. This makes the region a very attractive destination for national and international firms looking to cement their market footing or to commercialize their products in an environment that requires access to valuable airspace.





DIVERSE AUTONOMOUS SYSTEMS AND UAS ECOSYSTEM



Microsoft's commitment to play properly in the drone space is reflected in the firm's announcement that AirMap has selected the Microsoft Azure cloud as the company's exclusive cloud-computing platform for its drone traffic management platform and developer ecosystem.



CRITICAL SUPPLIER BASE

In addition to the companies above there are a variety of input industries for this targeted sector that make up a critical supplier base from which to build on. This demonstrates the impacts of building a robust AUS industry do not occur in a vacuum but have a ripple effect on new market opportunities for existing suppliers and manufacturers with upstream capabilities. All of the following upstream supplier clusters maintain a strong presence within the FM market:

- Industrial Machinery Manufacturing
- Fluid Power Valve and Hose Fitting Manufacturing
- Software Publishers
- Electronic Computer Manufacturing
- Audio & Video Equipment Manufacturing
- Plastics Pipe and Pipe Fitting Manufacturing
- Motor Vehicle Electrical and Electronic Equipment Manufacturing
- Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
- Motor Vehicle Transmission and Power Train Parts Manufacturing

Add testimonial here?





Created by North Dakota with an initial investment in 2019, Vantis provides turnkey support to commercial and public UAS operators through infrastructure and regulatory approvals allowing applications and usability over a variety of industries. Visit VantisUAS.com for more information.



ECOSYSTEM PARTNERS

VANTIS

North Dakota's statewide unmanned aircraft systems (UAS) beyond visual line of sight (BVLOS) network is the first of its kind in the nation.

THE NORTHERN PLAINS UAS TEST SITE

The Northern Plains UAS Test Site (NPUASTS) is one of seven Federal Aviation Administration (FAA) UAS test sites in the nation. The mission of the NPUASTS is to collaborate with FAA and industry partners to develop systems, rules, and procedures to safely integrate unmanned aircraft into the National Airspace System without negatively impacting existing general or commercial aviation. NPUASTS administers Vantis.

NORTH DAKOTA STATE COLLEGE OF SCIENCE (NDSCS)

ROBOTICS, ANIMATION AND MECHATRONICS TECHNOLOGY (RAMT) PROGRAM

RAMT is designed to provide students with the knowledge, skills, and abilities necessary to succeed in industries utilizing robotics and automated systems. This program combines disciplines such as electronics, networking, computers, mechanics, and fluid power utilized in manufacturing and production facilities.

RESEARCH INSTITUTE FOR AUTONOMOUS SYSTEMS (RIAS)

The institute integrates the resources of the North Dakota University System to advance efforts in unmanned and autonomous systems. RIAS encompasses all research activities in unmanned and autonomous systems at UND and engages researchers across a broad spectrum of disciplines to catalyze and support research and technology development across the unmanned and autonomous systems enterprise.



BUSINESS CLIMATE & DEMOGRAPHICS

North Dakota is a low regulation state and benefits from a very friendly business environment. U.S. News and World Report ranks North Dakota as one of the 10 states with the least regulation.

Fargo Moorhead combines urban excitement with a small-town friendly atmosphere, reliability and safety. The metro encompasses Cass County on the North Dakota side of the Red River and Clay County on the Minnesota side.

YOUNG & EDUCATED

- Median Age = 32 years
- 25,000 college students
- 5 universities/technical colleges

Population is growing - 251,000 in 2021 with 3.8% growth predicted between 2021 and 2026

54% of residents have college degrees

28.2% of Fargo, ND-MN residents possess a Bachelors Degree which is 7.9% higher than the national average. 14.3% hold an Associates Degree which is 5.6% higher than national average.

COST OF LIVING





CAPITAL, FINANCING, INCENTIVES, AND GRANTS



The following programs represent a small snapshot of a larger collection of powerful financial tools and incentives available new and expanding businesses looking to grow in the Greater Fargo Moorhead region. For a full assessment of which programs may be eligible to support your business growth, reach out to Ryan Aasheim, Chief Business Development Officer - raasheim@fmedc.com

LIFT PROGRAM

INNOVATION TECHNOLOGY LOAN FUND

0% loan up to a million dollars for the first three years and 2% for the next two years for financing the commercialization of intellectual property

APUC

AGRICULTURAL PRODUCTS UTILIZATION COMMISSION

\$250,000 grant program to support the development of new and expanded uses of North Dakota's agricultural products.

**Grantee must provide a 25% match

BIOSCIENCE INNOVATION GRANT (BIG)

Grant program to support biotechnology innovation and commercialization towards the development of new bioscience technologies and bioscience startup companies in the state.

MINNESOTA INVESTMENT FUND

The Minnesota Investment Fund provides financing to help add new workers and retain high-quality jobs on a statewide basis. The focus is on industrial, manufacturing, and technology-related industries to increase the local and state tax base and improve economic vitality statewide.

LAUNCH MN

Targeted at innovative scalable technology businesses in Minnesota, the grants provide up to \$35,000 for business operations and potential matching grants up to \$50,000 for first time Phase I and Phase II SBIR/STTR awardees

NORTH DAKOTA

DEVELOPMENT FUND (NDDF)

Up to \$3 million low interest loan or equity financing Venture Capital Program – up to \$3 million in equity or convertible loan

INNOVATE ND

Participants have access to up to \$40,000 of expense reimbursements and grants through the four phases of the program.

GROWTH INITIATIVE FUND

Microloan (\$50,000) and direct loan program

NORTH DAKOTA GROWTH FUND

\$100 million multi-stage investment fund that will seek to invest in North Dakota businesses and entrepreneurs.

BANK OF NORTH DAKOTA (BND)

PACE/Flex PACE – through a state grant and an additional deferred payment community loan, this program provides low-interest term financing for real estate, equipment or certain working capital

Accelerated Growth Loan – designed for technology companies with solid operations, good management and strong cash flow that are positioned for a period of accelerated growth or can show consistent monthly revenues above \$50,000.

