



**FARGO  
MOORHEAD**  
ECONOMIC DEVELOPMENT

# AgTech

## Targeted Growth Sector



**OVER 150 YEARS**

Agriculture has been the backbone of the Greater Fargo-Moorhead regional economy since homesteaders started farming the land over 150 years ago. Since that time, our region's strength in agriculture and innovation has spawned a multitude of agriculture technologies and global equipment companies dedicated to improving productivity, efficiency, and life on the farm



## TECHNOLOGY BREAKTHROUGHS

Early AgTech pioneers in North Dakota developed:

- **Bobcat** - the first skid steer loader
- **Steiger** - the first reliable high powered articulated four-wheel drive tractor
- **Great Plains Software** - innovative accounting package for agriculture (now the 3rd largest Microsoft campus here in Fargo)

Since these early technology breakthroughs, the region continues building on its innovative culture. Many companies come together to create a regional hub for sharing ideas and entrepreneurship.

- Phoenix International acquired by **John Deere Intelligent Solutions**
- Appareo Systems acquired by **AgCo**
- Harvest Profit acquired by **John Deere**





# DIVERSE AGTECH ECOSYSTEM

Some of the biggest and strongest brands in ag equipment, technology, and manufacturing have been started or developed here.



*"The decision for Soiltech to choose Fargo as the hub for our Midwest operations was an easy one. There is a genuine enthusiasm to foster development and provide true support to growing companies in the Fargo Moorhead region. GFMEDC, The Grand Farm and Plug and Play did not just talk – they took real action. They warmly welcomed Soiltech, helped facilitate meaningful connections and made the process of developing a presence there truly seamless. We look forward to expanding our operations in the region and hope to help the agriculture industry with our technology."*

Ehsan Soltan, Founder & CEO, Soiltech



## TALENT & EDUCATION

The Fargo-Moorhead metro area is exceptionally young and well-educated with world class elementary and high schools, two career academies (Moorhead and Cass County) and five major universities and colleges ensuring workforce and the needs of industry are aligned. Here is a sample of the AgTech talent being produced out of our world class higher education institutions.

- Agricultural Engineers
- Electrical Engineers
- Mechanical Engineers
- Computer Hardware Engineers
- Software Engineers and Developers
- Agronomists
- Agricultural and Food Scientists
- Soil Scientists
- Autonomous and Robotics Technicians
- Environmental Scientists & Geoscientists





## ECOSYSTEM PARTNERS

### FARMS ENGINE

FARMS is a collaborative ecosystem created by the National Science Foundation (NSF) Regional Innovation Engines program, with an award up to \$160 million, to solve global food insecurity and to create equitable agricultural opportunities. FARMS is powering ideas that feed the world and creates a global AgTech engine characterized by a flourishing ecosystem where new knowledge is co-designed into new technologies, services, and startups to address stressors impacting food insecurity and to establish equitable agricultural opportunity. Led by NDSU, FARMS is composed of a core group of partners including Grand Farm, the FMWF Chamber Foundation, and the Greater Fargo Moorhead Economic Development Corporation. The FARMS ecosystem includes the North Dakota Tribal College System, the North Dakota Tribal communities, North Dakota universities and colleges, industry, non-profits, and other regional research universities. Through AgTech innovations, FARMS holds the potential to improve how the nation produces food for the world.

### GRAND FARM

Grand Farm is a North Dakota non-profit that accelerates collaboration and innovation to develop technologies for the farm of the future by being a neutral platform for industry (including startups), growers, higher education, and government to collaborate on autonomous and advanced agriculture technology.

### NORTH DAKOTA STATE UNIVERSITY

NDSU research has contributed to the development of agriculture in the region through countless innovations in fields directly and tangentially related to agriculture, natural resource management, and foods and food products. More than 90% of the income from patents and licensing at NDSU is derived from agriculture. NDSU has developed an undergraduate major in Precision Agriculture (one of two in the nation) and has strong research capability in agriculture, engineering, and other fields related to production agriculture.

### VANTIS

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



## BUSINESS CLIMATE & DEMOGRAPHICS

North Dakota, a low regulation state, benefits from a 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 in North Dakota and Clay County in Minnesota.

### YOUNG & EDUCATED

- Median Age = 33 years old
- 21,000 college students
- 5 universities/technical colleges

Population is growing - 258,000 in 2022 (6.9% growth over previous 5 years with 7% growth predicted by 2027).

**55%** of residents have college degrees

27.9% of Fargo/Moorhead residents possess a Bachelors Degree (7.1% higher than the national average). 14.2% hold an Associates Degree (5.4% 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](mailto: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.

## NORTH DAKOTA DEVELOPMENT FUND

Provides “flexible gap financing” through loans and equity investments not available from most conventional lenders. Up to \$3,000,000 through innovative financing mechanisms including direct loans, subordinated debt and equity investments.

## ANGEL MATCH PROGRAM (ND)

Private investor investments in eligible business can be matched up to a maximum \$250,000 per business. Businesses may only apply for funds if the total financing round is \$2 million or less. Investors may be individuals, LLCs, businesses, trusts, or an investment fund.

## GROWTH LOAN FUND (MN)

Supports entrepreneurial growth throughout Minnesota by offering low-interest loans to early-stage businesses. The business must be planning to raise equity in order to qualify. Loans range from \$100,000 to \$400,000.

## INNOVATE ND

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

## NORTH DAKOTA GROWTH FUND

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

## GROWTH INITIATIVE FUND (ND)

Microloan (\$50,000) and direct loan program administered by the Greater Fargo Moorhead Economic Development Corporation (GFMEDC).

## MN DIRECT INVESTMENT & MULTI-FUND

Two VC programs investing in Minnesota-based seed and early-stage businesses in the advanced manufacturing, agtech/foodtech, climate tech, life sciences, software, and technology sectors.

## BANK OF NORTH DAKOTA

This state-owned bank partners with commercial lenders to assist in financing, such as PACE/Flex PACE low-interest loans and the Accelerated Growth Loan targeted to ND-based tech companies experiencing accelerated revenue growth.

## 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.

## WONDER FUND

\$45 million direct investment program providing early-stage investment opportunities for financial and operational growth. Funds from the program will be used to invest in early-stage businesses headquartered in North Dakota with less than 500 employees and will consider companies based outside the state if their product and service have a material impact on North Dakota.

