



North Dakota

A testing ground for drone development

North Dakota fell from an Innovation Champion to an Innovation Leader and faces many of the same challenges as other states with large rural areas: internet access and lack of investment.

But the state is a step ahead when it comes to drones. In 2013, its Commerce Department was one of six organizations chosen by the Federal Aviation Administration to take part in a drone testing program that eased restrictions in designated areas. That waiver made North Dakota an attractive option for companies and organizations looking to put their aerial tech through real-world paces without jumping through regulatory hoops.

Now, the state is a nexus for drone development. The Northern Plains test site attracts small operations, global companies and academic research. North Dakota college students are developing their own innovations, such as a drone that can save power by perching itself on a bridge like a bird. Farmers also use drones to monitor some of the state's 39 million acres of agricultural land.

"This industry is moving at the speed of technology, not bureaucracy," said Nick Flom, director of the Northern Plains Unmanned Aircraft Systems Test Site in Grand Forks.

The interest in drones has even caught on with North Dakota's high school students. Williston High School administrators are developing a drone aviation program that gives students an opportunity to become certified drone operators.

Sources: (Fortune) (USA Today) (Williston Herald)

WHAT DID WE DO RIGHT?

In 2017, North Dakota passed a bill requiring the state Department of Transportation to study how existing laws should apply to self-driving vehicles.

WHAT CAN WE DO BETTER NEXT YEAR?

North Dakota was one of the worst performers in Grants Advanced Degrees, with less than eight percent of its population holding an advanced degree.

WHERE HAVE WE MOST IMPROVED?

Ridesharing is legal statewide.

Best & Brightest	B
Fast Internet	B
Grants Advanced Degrees	F
Tech Workforce	B
Tax Friendly	B-
Attracts Investment	D
Entrepreneurial Activity	A-
Ridesharing	A
Short-Term Rentals	B
Sustainable Policies	B
Self-Driving Vehicles	B
Drones	A



Entrepreneurial Activity

Small businesses added jobs at a faster rate than those in nearly every other state, creating nearly 79 new positions per 1,000 people from Q2/2011 through Q4/2016.



Tech Workforce

Nearly 38 jobs per 1,000 people are in the tech industry, outpacing many other states.



Tax Friendly

Despite low marks for income and sales tax policies, North Dakota boasts a relatively business-friendly top corporate tax rate of 4.31 percent.



Fast Internet

Nearly 65 percent of households in North Dakota have internet connections of at least 10 mbps, and 48 percent enjoy speeds of 25 mbps or more.

Ramping Up STEM Training for Students in the Roughrider State

Two STEM-focused programs are cultivating new interest in coding and engineering among students in North Dakota.

The state Department of Public Instruction will partner with Microsoft to expand the company's Technology Education and Literacy in Schools program throughout the state. The initiative, currently underway at just one high school in North Dakota, pairs computer science professionals with high school teachers to offer computer science classes. The Microsoft program also helps students expand their skills outside the classroom with hackathons and summer internships.

In Fargo, North Dakota State University partnered with PODS Game Design to teach a handful of middle schoolers and high schoolers the coding and computing skills necessary to design video games. A week-long workshop on the NDSU campus gave students the chance to develop their own video games and submit the finished products to the national Scholastic Art and Writing Awards competition. PODS will continue encouraging students to learn game design with a host of classes throughout 2018, including classes at elementary schools.

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