NURTURING ECONOMIC DIVERSITY
Investing in UND is the best path to diversifying our economy and making us less dependent on the price of oil and wheat. UND’s aviation school helped kindle the birth of North Dakota’s unmanned industry. Our unmanned aviators, engineers, and entrepreneurs are diligently pursuing the goal of making the Red River Valley the Silicon Valley of drones, with recent investments by Northrop Grumman and General Atomics just the start. UND played a role in helping to spark the recent oil boom. UND’s researchers are working hard to increase the amount of oil recoverable from Bakken shale, while reducing the cost and environmental footprint of doing so.

GROWING NEEDED TALENT
During these challenging times, we face a skills deficit that constrains our growth. UND-educated doctors, nurses, teachers, and lawyers are needed to address acute shortages, but so are our scientists, engineers, and unmanned aircraft systems experts. Two out of three MDs and eight of ten American Indian nurses in the state are UND graduates. UND offers a wide range of programs online, enrolling nearly 3,000 students and providing lifetime learning opportunities throughout the state.

LEVERAGING STATE FUNDING
For every state dollar supporting UND research, we attract six dollars in outside funds. UND’s more than $97 million in annual research expenditures funds high-paid jobs in North Dakota and offers multiple opportunities for entrepreneurial spinoffs. UND fully utilized the state’s fundraising and maintenance matching programs, magnifying the impact of the state’s investment to result in more scholarships and action on deferred maintenance. With state funding constrained, these matching programs are even more important.

Daniel Patrick Moynihan opined, “If you want to build a world-class city, build a great university and wait 200 years.” Our visionary ancestors built a university on the Dakota frontier in 1883 that has contributed greatly to the wonderful state we have today. Investing in the University of North Dakota continues to offer opportunities for a brighter future for our citizens.
UND focused on helping to diversify North Dakota’s economy, close the workforce skills gap

The Red River Valley of North Dakota has been dubbed the “Silicon Valley of drones” by The New York Times, largely because of pioneering efforts in UAS by UND and its aerospace scientists and engineers. These efforts have paid off in a big way for Grand Forks and for North Dakota. UND’s growing UAS education and research enterprise — creating the nation’s first major in UAS and graduating the nation’s first students in UAS — helped Grand Forks County work with the Grand Forks Air Force Base to create the Grand Sky UAS Business Park, which helped attract major companies like General Atomics and Northrop Grumman.

“We view UND as an international leader in furthering the cause of unmanned aircraft systems and producing highly capable graduates in this field.”

Acute shortages in these important occupations and others across North Dakota are compounding with current economic woes to limit the state’s ability to grow. UND, as the state’s chief opportunity engine, is dedicated to efforts to reverse these trends.

Leveraging state funding

Kennedy also stressed that state funding matches for contributions from private donors has helped leverage even more outside resources to fund priority needs. If those increased state matches are extended to money spent on capital expenditures, the additional funding would be a major help in UND’s ability to address about $500 million in deferred maintenance needs on campus, Kennedy said.

“The path back to growth requires diversifying our investments in research to diversify our economy, investing in the skilled workers the economy needs to grow, and giving universities the tools they need to attract private donations to chip away at our deferred maintenance mountain,” Kennedy said.

UND’s research enterprise, alone, attracts more than $6 from out-of-state sources for every $1 it receives from the state, according to the National Science Foundation’s Higher Education Research and Development (HERD) rankings on research and development expenditures. State funding for research on unmanned aircraft systems (UAS), cybersecurity and energy exploration, areas in which UND is poised to collaborate with others to get more bang for the buck, could be leveraged by private and federal funding.

The University of North Dakota's message to legislators in Bismarck during the 65th North Dakota Legislative Assembly is that UND is the chief opportunity engine for North Dakota and North Dakotans and the premier flagship institution in the region. UND graduates and UND-educated colleagues are helping to diversify North Dakota’s economy by recognizing needs and opportunities in the state and applying what they learned at the University of North Dakota.

Diversifying the state’s economy

In an environment of economic downturns and calls for retrenchment, Kennedy said UND is the best path to propel the state forward.

“With state funding constrained, those matching programs are extended to money spent on capital expenditures, the additional funding would be a major help in UND’s ability to leverage even more critically needed workers in other professions. Similar programs would help increase UND’s ability to educate more even critically needed workers in other professions.

The New York Times

For example, the Healthcare Workforce Initiative funded by the North Dakota Legislature in previous sessions is already having an impact on the University’s ability to educate more healthcare professionals, many of whom will live and work in North Dakota.

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Read more stories about UND at blogs.UND.edu/und-today

Adapted from the Dec. 1, 2016 UND Today story “Making the case for UND”
Diversifying North Dakota’s Economy by Pioneering Unmanned Innovation

Building on its 40-year heritage as the leading university providing manned flight training, UND has in collaboration with federal and state officials and other state universities pioneered unmanned aviation, diversifying North Dakota’s economy in the process.

2006 Department of Defense designates UND as Center of Excellence for Unmanned Aerial Vehicle Education

2006 State of North Dakota designates UND as Center of Excellence for UAS Research, Education and Training

2008 UND offers first 4-year UAS degree in the world (grown to over 200 enrollees)

2013 FAA designates Northern Plains Test center the first UAS Test site in the nation – located at UND – allows flying UAS in national airspace

2014 UND assembles the first academic review panel to consider ethics and privacy matters relating to UAS testing

2014 UND designated a core member of the Alliance of System Safety through UAS Research Excellence – (ASSURE) team of universities

2014 Creation of Grand Sky UAS Business Park in Grand Forks, leveraging the region’s strong relationship with the Grand Forks Air Force Base that UND has helped to nurture

2015 Attraction of major UAS industries to Grand Sky (Northrop Grumman, General Atomics) – firms cite UND as an important variable in their decision to invest

2010–present UND’s Center of Innovation spawns growth of small UAS companies in Grand Forks and beyond

2015, 2016 UND engages in funded UAS research in power infrastructure, environment, agriculture, at times in collaboration with NDSU

2016 UND designated as the lead university for NSF-funded Digital Agricultural Spoke in partnership with Iowa State University, Kansas State University, and the University of Nebraska-Lincoln, reflecting the move beyond unmanned training, testing and innovation to focus on data supply chain

2016 UND creates UAS engineering certificate program

2016 UND opens Robin Hall, the nation’s first academic building dedicated to unmanned training

2016 UND-hosted Northern Plains UAS Test Site receives first FAA approval for beyond-line-of-sight operations, allowing companies in the state to conduct UAS operations that are not possible anywhere else in the nation.