NORTH DAKOTA’S TECHNOLOGY INDUSTRY TAKING OFF
Let’s taco ‘bout what it takes to build a business that continues to cook up great things year after year — like Vinyl Taco, which perfected the recipe for tuned in music and turned on tacos to keep their customers coming back for more. To do so, you need passionate leadership, ideas that thrive, and JLG Architects. See how Vinyl Taco is serving up happiness at jlgarchitects.com/Vinyl-Taco.
CONTENTS

05 In Your Corner

IN FOCUS

06 North Dakota’s Technology Industry is Thriving

07 North Dakota’s Tech Sector is Strong & Growing

09 North Dakota’s Tech Industry: By the Numbers

10 Leading the Way in Technology Ed

11 Networks are Transforming Our Lives

14 North Dakota: The Silicon Valley of Drones

18 Xcel Energy One of First in the Nation to Use UAS

19 Railroads Leverage Technology for Safety, Efficiency

22 Technology Continuing to Revolutionize Health Care

WORKING FOR YOU

26 Legislative ‘Halftime Report’

30 Chamber Day at the North Dakota State Capitol

31 Manufacturers Engage with Legislators

32 Local Chamber Spotlight: FMWF Chamber

THE INTERSECTION

37 Increasing the Minimum Wage: Focus on Economics, Not Politics

38 U.S. Chamber: Farmers are Taking it on the Chin with Tariffs

MEMBERSHIP MATTERS

40 Membership Makes a Difference

41 GNDC Members in the News

42 New & Renewed Members

Report on Business is published quarterly by the Greater North Dakota Chamber. Statements of fact and opinion are the responsibility of the authors alone and do not imply an opinion on the part of the officers, members or staff of the Greater North Dakota Chamber.

The Greater North Dakota Chamber is North Dakota’s premier business advocacy association. The GNDC is the only statewide business association solely dedicated to promoting and defending the free enterprise system on behalf of businesses of every size and in every sector. All rights reserved. Materials may not be reproduced or translated without written permission.

© By the Greater North Dakota Chamber.
Let our experts help you custom-design an employee benefits package that works for you today and helps you get to where you want to be tomorrow. Let’s get started on your employee benefits plan.

Contact an agent today.

**Jo Hatfield**
Fargo • 701.282.1153

**Mitch Kudrna**
Fargo • 701.282.1446

**Nicole Wolla**
Dickinson • 701.715.9028

**Kari Hunt**
Devils Lake • 701.282.1165

**Ryan Hartje**
Bismarck • 701.255.5562

**Don Kramer**
Grand Forks • 701.795.5348

**Derek Van Dyke**
Minot/Williston • 701.858.5019

EmployeePlansND.com
The first quarter of 2019 has been incredibly busy for GNDC as we are doing a number of things to serve our members.

First, and most critically, we’ve been advocating on your behalf before the North Dakota State Legislature. Our Director of Government Affairs, Matt Gardner, and I have been at the State Capitol every day of the session to make sure North Dakota’s business community is heard and its interests are protected. As you may remember, we unveiled our member-developed legislative agenda back in December focused on keeping North Dakota competitive, our workforce fully developed, and infrastructure investments are made in order to support and sustain business growth. As we have been working every day to advance this agenda, we have also been vigilant in opposing those proposals that would stifle economic growth and harm North Dakota’s business community.

I am especially pleased that our efforts have not been alone. GNDC has cultivated strong ties with other like-minded partners. Often, we are the most conspicuous member of a coalition in testifying for or against legislation. At other times, we are content to lend our name and credibility to efforts as others take the lead. As we are now in basketball tournament season, I can tell you that whether we are up front or behind the scenes, advocating for North Dakota’s businesses is a team effort that is yielding results. Please check out Matt Gardner’s comprehensive legislative report on page 26 to see where things currently stand.

CEO Roundtables: GNDC has also hosted two CEO Roundtables. GNDC members Steffes, TMI, and Fisher Industries sponsored our January event in Dickinson, where attendees learned about the important work being done by the Youth Entrepreneurs Program and the revolution taking place here in our state in the drone industry. Our March program in Bismarck was sponsored by members Bobcat, Midco, Kraus-Anderson, and North Dakota E-Waste and featured a wide range of presentations on latest developments in North Dakota’s manufacturing, technology, health care, and transportation sectors. Our CEO Roundtables remain one of our most popular programs and we strive to make each roundtable informative, engaging, and representative of North Dakota’s economy.

New ‘Report on Business’: Finally, as you have already noticed, this publication has a new look along with more features and pages. ‘Report on Business’ renovation project builds upon our success over the last two years in transforming this magazine from one that simply expresses our work and shares our views to one we hope enlightens our readers. This is why we will continue to invite columns and stories from our members along with movers and shakers across our state. Our special ‘In Focus’ feature stories shine a spotlight on our state’s economy and most important policy issues. New columns and reports from our government affairs and membership services directors will keep you informed. And our new ‘Members in the News’ section will highlight both the good GNDC members are doing and celebrate their successes.

‘Report on Business’ will now be a quarterly magazine rather than a bi-monthly magazine. Our goal is to produce a quality publication that you look forward to receiving and reading four times a year.

Our advocacy work, our programs and this magazine are all part of our work on your behalf. They are in keeping with our vision to ensure North Dakota’s business climate is the best in the nation and our dedication to a well-informed and connected business community.

By Arik Spencer, GNDC President & CEO

Arik Spencer, CEO and President
Almost 22,000 North Dakotans, 4.7 percent of our state’s workforce, are employed in the technology industry. All together, there are more than 3,500 tech businesses in a sector that contributes approximately $3 billion to North Dakota’s Gross State Product.

You’d be forgiven for not knowing this.

You’d also be forgiven for picturing hoodie-clad-ear-bud-wearing-latte-sipping Millennials hunched over their laptops in Silicon Valley every time you hear the words “tech sector.”

The fact is North Dakota’s tech sector is transforming our economy by creating new jobs, changing the way businesses operate, and touching every aspect of our lives in ways we do not even know.

In our role as the voice of North Dakota business, GNDC believes we have a responsibility to tell our state’s economic story. This story is incomplete without a focus on our technology industry. And so, as we have in other issues for other industries, GNDC is devoting special attention to North Dakota’s tech sector.

GNDC has invited member businesses to share their stories and highlight facts about an often overlooked and underappreciated industry that is as critical to our state’s economy as agriculture, energy, manufacturing, health care and finance. Technology has earned its place as one of the pillars of North Dakota’s economy.

North Dakota’s technology industry is thriving. Here is a part of this thriving sector’s story.
Technology continues to be an economic driver for North Dakota as it impacts virtually all industries, from agriculture to health care and finance to energy, as well as stimulating job growth and innovation. The deck is stacked in our favor as North Dakota has seen numerous tech-related accomplishments over the past few years and is well-positioned to capitalize on several opportunities.

The state is led by Gov. Doug Burgum, a former tech entrepreneur and businessman. Entrepreneurs, such as 2018 North Dakota Technology Champion Barry Batcheller, founder of Appareo, are locating here due to public and private sector commitment to technology infrastructure, education and business-friendly policies.

Two new data centers were recently completed, significantly expanding data storage capacity in the state. North Dakota is known nationwide for its advancements in unmanned aerial vehicles. And, North Dakota is a national leader in broadband connectivity with more than $938 million invested in broadband infrastructure and the announcement that the state will be the first in the nation to achieve one-gigabit connectivity for all its school districts.

Technology continues to play a vital role in North Dakota’s economy, and the future of the industry is bright. As the industry continues to evolve, collaboration at the state and federal level will allow North Dakota’s tech industry to remain a strong competitor in the global economy.

**Contributing to the Economy**

North Dakota’s economy is strong, and the state’s technology industry is no exception. With job growth in North Dakota’s technology subsector increasing by more than 11 percent over the past decade, the industry remains a growing and vibrant part of the state’s economy. Opportunities for existing and start-up tech businesses are abundant, and North Dakota boasts one of the lowest unemployment rates in the country.

The state’s technology subsectors employ 21,744 people at more than 3,500 businesses. These businesses contribute...
nearly $3 billion to the state’s gross domestic product. There are 7,880 North Dakotans with technology occupations. These include jobs in the technology industry, but also in other industries, such as agriculture, energy, finance and health care. The average annual wage for technology positions in North Dakota is $61,900, which is 23 percent higher than the state average.

Addressing Workforce Needs

With this success comes one looming challenge – lack of workforce. North Dakota has seen an increase of more than 27 percent in technology occupations over the past decade and is projecting a 20 percent increase for the next 10 years. Between 2016 and 2026, it is estimated more than 6,500 new and replacement technology positions will be needed in North Dakota. Growth in the industry will create the need for more than 1,300 employees to fill new positions, and the remaining positions will be replacements. With the state’s technology industry currently employing 7,880 North Dakotans, this projected growth means replacement and new positions will equal 82 percent of the state’s current technology workforce.

To address this issue long-term, the Technology Council of North Dakota (TechND) has partnered with the North Dakota Department of Public Instruction, along with several other public and private entities, on the North Dakota Computer and Cyber Sciences Education Initiative (CCS). This initiative will make us the first state in the nation to provide technology and security fundamentals for all students by adopting K-12 computer and cyber science standards. The CCS Initiative will provide a foundation for students to acquire the base technology and security knowledge vital to the future workforce, no matter what career path is pursued.

In addition, North Dakota currently offers internship and apprenticeship opportunities, more than 60 post-secondary tech-related education programs, a STEM loan forgiveness program and numerous workforce training programs.

Anticipating Trends

The ever-changing environment of the technology industry creates ongoing opportunities and challenges. Tech leaders statewide recently identified hybrid cloud services, mobility and security as the trends that most impact North Dakota’s technology industry.

On the national level, the Computing Technology Industry Association (CompTIA) has identified the top three trends to watch in 2019 as cloud and edge computing and 5G networks, Internet of Things and artificial intelligence, and distributed ledger technologies. The state and nation are well positioned to take advantage of the opportunities and address the challenges presented by these emerging trends due to the cooperation among industry, government and education entities.

All industries have an incredible opportunity to leverage technology like never before. TechND will do its part by continuing to actively encourage the use, growth and development of technology in North Dakota. This will be accomplished by advocating for favorable policy, addressing workforce needs and championing the technology community.

Jeremy Neuharth is the co-owner and founder of Sycorr, a Fargo-based veteran-owned small business founded in 2010. Sycorr provides technology services to banks and credit unions throughout the region. Sycorr is a member of GNDC and Neuharth is currently serving as the Chair of the GNDC Board of Directors.
North Dakota – national leader in:
• Broadband connectivity with more than $938 million invested in broadband infrastructure
• Providing one-gigabit connectivity for all its school districts
• Unmanned aerial vehicle advancements
• Adopting K-12 computer and cyber science standards

North Dakota’s technology sector provides:
• $3 billion to the state’s gross domestic product
• 21,744 jobs at more than 3,500 companies
• An average wage 23 percent higher than the state average

Technology job growth at a glance
• 27 percent increase in technology occupations over the past decade
• 20 percent increase in tech jobs expected over the next 10 years
• More than 6,500 new and replacement technology positions needed by 2026

Trends most impacting North Dakota’s technology industry
• Hybrid cloud services
• Mobility
• Security

Top hiring challenges reported by U.S. employers
• Finding workers with skill/experience in emerging areas
• Finding workers with desired soft skills
• Intense competition for tech talent
• Rising salary expectations
• Limited pool of available workers in local region

Sources: TechND, CompTIA IT Industry Outlook 2019

Founded in 2000 by North Dakota business, government and education leaders, TechND advocates for a positive business climate for technology companies, address workforce needs, encourage infrastructure development and provide knowledge sharing opportunities for its membership, which consists of more than 65 North Dakota business, government and education entities.

For more information, visit www.techND.org or contact President Jeremy Neuharth at either jneuharth@sycorr.com or 701-540-4976 or Executive Director Deana Wiese at office@technd.org or 701-355-4458.

TechND is a member of the Greater North Dakota Chamber.
The Technology Council of North Dakota (TechND) is a partner in the North Dakota Computer and Cyber Sciences Education Initiative (CCS Initiative), which is being led by the North Dakota Department of Public Instruction (DPI). TechND supports DPI’s efforts to be first state in the nation to provide technology and security fundamentals for all North Dakota students by adopting K-12 computer and cyber science standards.

A group of stakeholders recognized the significant demand and need for students to learn how to effectively and safely leverage technology and formed the Digital Workforce Coalition in support of the CCS Initiative. The newly formed coalition is made up of business, education and government entities that recognize base computer science skills are necessary to the future workforce of our state. This includes representation from numerous sectors, including education, technology, agriculture, energy, and hospitality.

Technology drives job growth and innovation throughout our economy and society. Computing occupations are the number one source of all new wages in the United States and make up more than half of all projected new jobs in STEM fields. In addition to computing jobs, technology impacts virtually every occupation. Foundational technology and security knowledge is not just an opportunity for students; it is vital for any career field.

However, to date, it has not been an educational focus. Fewer than half of U.S. schools offer any computer science courses and only eight percent of STEM graduates study it. Improved access is needed for all students, including groups who have traditionally been underrepresented.

According to Code.org:
- 58% of new STEM jobs are in computing
- 8% of STEM graduates are in computer science
- 93% of parents want their child’s school to teach computer science, but only 40% of schools teach it
- 67% of parents and 56% of teachers believe students should be required to learn computer science
- 50% of Americans rank computer science as one of the two most important subjects after reading and math

North Dakota currently has 935 open computing jobs, which is 3.3 times the average demand rate. The average salary for a North Dakota computing occupation is $70,000, which is 49 percent higher than the state’s average salary. The existing open jobs alone represent a $65.7 million opportunity in terms of annual salaries. Yet North Dakota had only 117 computer science graduates in 2015, 96 AP Computer Science exams taken by high school students in 2017, and 10 schools that offered an AP Computer Science course in 2016-2017, which is seven more than the previous year. Universities in North Dakota did not graduate a single new teacher prepared to teach computer science in 2016.

The CCS Initiative will provide a foundation within K-12 for students to acquire the base technology and security knowledge vital for the future workforce, no matter what career path is pursued. It is essential that students are taught to leverage technology safely and effectively as it will impact any chosen occupation.
Modern networks are the foundation for communication, collaboration and innovation – and they’re also a catalyst for change and progress in our communities, at work and in our homes. They will transform our lives in ways we can imagine, and in ways we have yet to imagine.

Network technology and capability are continually expanding. Driven by unprecedented consumer demand and growth over the last ten years, network providers like Midco® are on a continual cycle of improvement and reinvestment to stay ahead of that demand. We’re reaching more homes and businesses than ever, and

NETWORKS ARE TRANSFORMING OUR LIVES

By Jon Pederson, Chief Technology Officer, Midco
our network capacity has increased beyond our wildest imagination. The amount of internet growth for one month in 2018 was roughly an entire year’s growth in 2008.

In the early days, your network connection was used for typing memos, checking email and surfing the web. Today, we watch movies, video conference, tweet, trade stocks, shop, date, summon a driver, start our cars and so much more. We carry more connectivity and computing power in our pocket than the largest mainframe computers that first signed on to the internet.

Networks are the great enabler, creating direct and indirect connections. Our network enables Wi-Fi networks in homes, business networks, mobile networks and rural networks. We interconnect with more than a hundred other networks. Networks upon networks create connections that bring the world closer together, shrinking distance and promoting collaboration.

Collaborative connections fuel innovative and creative solutions. All across the country and the world, innovators are coming up with new ways to leverage this new world of connectivity to provide better healthcare, education and precision farming – as well as to invent, to work together and to monetize. Here are a few high-priority areas for us, as we evolve the Midco Network for the future

**Home Networks and IoT (Internet of Things)**

It’s been said that “if it runs on power, it will be connected to the internet.” This prediction is coming true, as we’ve seen Wi-Fi and Bluetooth-enabled crock pots, scales, blenders and tools. You can buy a sander that talks to an app on your phone to keep track of the amount of vibration in your hand over time. With video doorbells, you can answer your door from anywhere, even another country.

Recently, it was announced that researchers developed a small, Wi-Fi-powered antenna. This device can convert Wi-Fi signals into usable electricity. While the amount power is very small, it’s enough to run small sensors. Imagine installing temperature sensors the size of a thumbtack in your home, no cord or battery required. Power, at least in the traditional sense, seems less necessary than we originally thought.

There was a recent movie that featured the ability to map a house and the people moving inside it via Wi-Fi. This is not science fiction, and there are several companies working on this technology. Using the ambient Wi-Fi in your home, it’s possible to detect if the room is occupied or not. Right now, the capability is a little crude, but by applying AI (artificial intelligence) and big data processing, it should be possible to map an entire house and the movement patterns of the people inside. This has profound implications for independent living and home healthcare. Such technology can detect a change in movement habits over time or send alert if someone has fallen.

I think we are only scratching the surface of IoT and home networking capability, and right now it’s a little bit like the wild west. There are few standards and no security. Midco is a member of the Wi-Fi Alliance and the Open Connectivity Foundation that are establishing security standards for IoT devices. As the boom in connected devices continues, a standard for managing those devices securely will be fundamental to having a “smart” and connected homes and businesses.

**Rural Broadband and Smart Ag**

The progress in “smart” or precision agriculture over the last several years has been astounding. Farmers can plant and fertilize according to the parameters of specific sections of land, saving money and increasing yields. The modern farm is a connected, engineering marvel.

However, the challenge of homes and businesses being too far outside of town remains. Rural connectivity is often non-existent or too slow. Farm equipment and sensors can collect a ton of information, but if it can’t be uploaded, stored and analyzed, its usefulness is lessened. We all know that broadband connectivity has become a necessity for modern life. Living ten miles outside of town should be a benefit, not a limitation.

It’s possible to build fiber networks to smaller towns, but it’s expensive to serve individual homes and farms or places that aren’t en route to larger cities. I’m constantly asked, “When are you coming to my house or town?” Recent and pending advances in wireless technology will help us expand our network reach and include more rural locations.

In 2018, Midco acquired a North Dakota fixed wireless company called InvisiMax. InvisiMax already served a large portion of eastern North Dakota, and it had a cutting-edge experimental license for CBRS, a new wireless spectrum due to become available in late 2019. When we used new technology called carrier aggregation to test this frequency, we proved out download speeds of up to 200 megabits per second and a wireless reach from our fiber up to 30 miles.

Because of these test results, Midco was provisionally awarded federal funding to further expand our reach in rural America.
We’ve since acquired an experimental “C-band” license and plan to start testing this spring of this year – which will include testing of “LoRa,” a type of long-range IoT. While the highly touted 5G will do little for rural connections, it’s our hope that associated advances in radio technology and signal processing will trickle down to help fuel further innovation in the rural wireless space.

**Edge Computing**

Most people don’t realize that if you stream a movie on the Midco Network, there’s a better than 90% chance that the movie is being streamed from a nearby Midco data center, rather than being pulled from the internet. Some local internet content is “cached” on the edge of the network to improve performance and reduce costs.

Edge computing is a trend we are watching very closely. Although the pace of network capacity has increased 50% every year (Nielsen’s Law), it’s still slower than the rate of computing power increase (Moore’s Law). More processing and storage is taking place “in the cloud,” often without our knowledge – and sometimes the cloud is just too far away. Because of that, some storage and intensive processing will be pulled in closer to improve performance and reduce latency (improve responsiveness).

Although low latency is important for many applications, it’s crucial for gaming. It’s easy for those not involved in gaming or esports to underestimate its impact. Gaming is a rapidly growing, multibillion-dollar industry with advanced graphics that are second to none – and those innovations flow into other industries. Esports boasts of 400 million fans, will be included in the 2022 Asian games and is being considered for the 2024 Paris Olympics.

Midco recently started an innovative collaboration with a startup company and an international equipment provider to explore this new world of edge computing, beginning with gaming, but potentially moving to applications in nearly every industry that needs to process large amounts of interactive data quickly. Examples might include augmented reality, autonomous vehicles, facial recognition, security, machine learning and more.

One of my favorite recent advances is a thing called GAN, Generative Adversarial Network. The idea is that you pit a program designed to create realistic-looking faces against a facial-recognition program and let them duke it out, one feeding into the other. The results are astounding and provide a glimpse of the type of innovative processing that edge computing might enable.

**Networks of the Future**

At the Consumer Electronics Show in January 2019, Midco announced we’re partnering with others to officially launch 10G, the next great leap forward for broadband. 10G is an international platform and a roadmap of continuous improvement that builds upon our existing network foundation, expanding it to meet the future. The world is a connected place – and the networks of today and tomorrow will drive the innovations that make those connections matter and transform our lives.

---

Jon Pederson is Chief Technology Officer at Midco, which delivers networking, internet and fixed wireless connectivity to 385,000 residential and business customers in North Dakota and four other Midwest states. Midco also offers data center, business voice, cable TV and advertising services. Learn more at Midco.com/Business or Midco.com/10G.

Midco is a GNDC Gold Cornerstone Member.

---

**READY TO MIDCO?**

Midco® Business has the technology that works as hard as you do. Whether it’s emails, e-commerce, in-store credit card transactions or a custom network for multiple locations, put Midco Business Internet to work for you.

- **Reliable, Secure Connection**
- **Flexible Bandwidth Options**
- **24/7 Business Support**

**Call 1.800.888.1300, or visit Midco.com/Business**

© 2019 Midcontinent Communications. All rights reserved.
NORTH DAKOTA: THE SILICON VALLEY OF DRONES
Q&A: Matt Dunlevy
SkySkopes

SkySkopes is a professional Unmanned Aircraft Systems (UAS) flight operator headquartered in Grand Forks with offices in Minot, Williston and Minneapolis.

It is North Dakota’s first unmanned aircraft startup certified by the Federal Aviation Administration (FAA) to fly commercially. SkySkopes deploys some of the most highly certified UAS pilots for use in its commercial operations throughout the U.S. in conducting aerial inspections, energy audits, and other technological services for the oil and gas industries. The company is a member of GNDC.

Matt Dunlevy is the President, CEO, and founder of SkySkopes. Under his leadership, the company grew from a group of four employees to an organization of national recognition in under three years. Dunlevy studied mechanical engineering and history at the University of North Dakota (UND). During that time, he became interested in entrepreneurship and founded several startups before ultimately combining a lifelong passion for aviation with his drive for business to form SkySkopes. Dunlevy has taught numerous courses at UND, including UAS in Business, UAS in Engineering Design and Applications, and the Ethics of UAS. Dunlevy’s aviation experience includes logging hundreds of flights on manned powered aircraft, gliders, and hobbyist unmanned aircraft since his teens.

The UAS industry is one of the fastest growing industries in the United States, yet it remains a curiosity to many. GNDC asked Dunlevy to provide information on the industry generally, SkySkopes specifically, and UAS’ potential for North Dakota’s economy.

Q: Let’s start with a simple question: What can you do with UAS?

A: The question I like to ask is what can’t one do with UAS? Of course there are regulatory and technological limitations but, especially in North Dakota, the sky is the limit for the UAS industry.

I like to tell people UAS are tools that assist humans from the air in niche ways that are impractical to accomplish from the ground or with manned aircraft. Currently, with the state of the industry and in this regulatory environment, the niche that scales UAS as an industry is low altitude data collection.

There are other missions being executed now that also serve as indicators of the future of UAS. Recently, for example, SkySkopes was the first UAS flight operator in the nation to successfully fly UAS to string transmission lines in lieu of helicopters.

Amazon and other companies are working on package delivery with drones. In the not-so-distant future, there will be packages delivered to our homes via drone or even food from one’s favorite nearby restaurant.

The work now being done in precision agriculture by John Nowatzki and his flight crews at NDSU is going to help revolutionize agriculture in many ways. For example, they are the first in North Dakota to use UAS to spray crops from the air.

We will also soon see battery powered multi-rotor aircraft being used as taxis to transport people short distances in cities. This is already being done in Dubai and we will soon see Uber do the same here in the United States.

Q: What does UAS mean for North Dakota’s economy?

A: UAS means economic diversification. Back in 2013, the Association of Unmanned Vehicle Systems International (AUVSI) conducted a study claiming North Dakota would see $14 million in economic stimulation from UAS from 2015 through 2017. They were short by almost $20 million.

With the potential passage of HB 1018 in the Legislature, we will be even further along the way to beat AUVSI’s projected $83 million in economic impact between now and 2025.

Another projection was that there would be 103 UAS jobs created in North Dakota by 2025. Again, they were way off.

Compare this estimate against the 100 jobs already created by Northrop Grumman at the Grand Sky Drone Park in Grand Forks.
North Dakota is doing disproportionately better in comparison to most, if not all, other states. As Senator John Hoeven says, emerging technologies are the “third economic wave” in North Dakota behind agriculture and energy, and the UAS industry is the leader in these emerging technologies.

**Q: Tell us about the kind of information SkySkopes gathers. And what do you do with the information?**

**A:** While we fly many different types of UAS sensors such as multispectral and thermal cameras, we do a lot of work with LiDAR, which stands for Light Detection and Ranging and is perhaps the most important payload on any commercial UAS.

With LiDAR, pilots can gather survey-grade points for a 3D model to give topographical information to engineering companies or even state departments of transportation.

SkySkopes utilizes a state-of-the-art system that provides our customers with level accuracy for their surveying needs.

In the utility and energy industry, we use the sensors for right-of-way monitoring and inspections. This offers quick and very accurate mapping of pipelines and utility power lines and streamlines vegetation management programs. The sensors are also used to identify areas of erosion and landslides.

The data, as information in a raw form or in a refined form, can and should be treated as intelligence by companies. If a company does not process the information in-house, SkySkopes will either hand raw data directly to the end user or hand the data off to a third party data analytics firm for further processing. This transfer will be executed in a SkySkopes cloud portal with bank-level cyber security, or in person on a physical hard drive. The information created can be in the form of maps, point clouds, geotagged images, videos and compliance reports. After SkySkopes processes information, the end users gain new levels of situational awareness.

**Q: How do you make the information/data actionable for your clients?**

**A:** Data analysis and ever-improving accuracies go hand-in-hand with UAS missions and the actionable intelligence produced thereafter is where much of the value of the UAS industry currently resides.

Algorithms, processing mechanisms, and software will narrow down the areas of responsibility subject matter experts will then observe. The more easily assets are identified, the easier the data is classified, calibrated and refined, making it more actionable. Most conveniently, faults are now detected in a way that does not require hours for a human to sift through data.

**Q: Where is this technology being used the most?**

**A:** In North Dakota and across the US, commercial UAS technology is currently being used most in the energy sector. There are so many applications for UAS in nuclear energy, photos provided by SkySkopes.
oil and gas, utilities, wind energy, and this seems fitting to us because battery-powered UAS are themselves a green technology.

Q: What do you see as future growth areas for the UAS industry?

A: For an operator such as SkySkopes, the growth areas have revealed themselves to be in the energy sector and will likely remain so for a while.

The technologies we use are also growth areas for the UAS industry as a whole. For example, the “longer the legs” of a UAS, the more important the Beyond Visual Line of Sight (BVLOS) permissions may become for missions over the horizon instead of simply out of the pilot’s vision. This suggests that augmenting technologies such as batteries are a growth area, and this cascades to make long endurance missions such as right-of-way UAS inspections even more of a growth area.

Stronger batteries are obviously going to revolutionize other technologies as well. On the construction side, new batteries can keep a UAS in the air longer in order for SkySkopes pilots to string more spans of transmission line towers for utilities in a single flight.

Artificial Intelligence is going to have a huge impact on every industry, but especially on the UAS industry. Aside from potentially being the most important thing humanity has ever worked on, AI hits two of the most important parts of UAS: flight maneuvers and data processing. Flight planning and execution will gain efficiencies through the use of AI and important data points will be apparent faster through similar AI and machine learning.

Another of the primary growth areas for UAS is in the numbers of certified pilots. By 2023, the FAA estimates the number of UAS commercial pilots to be over 400,000. Currently, there are 123,000 in the America. North Dakota probably has around 500 certified pilots and, considering trends, is on track for 2,000 to 3,000 certified pilots by 2023. With the increasing numbers of drone pilots come new regulations and the need for regulatory advocacy, which will certainly increase the number of lawyers specializing in UAS.

Q: Finally, why is North Dakota the Silicon Valley of Drones in the United States?

A: North Dakota is the drone capital of the United States because it understood the complete picture of UAS before all other states and put the pieces in place early on as the industry was just developing. The state’s commitment to UAS is seen in many ways. A good example of this is the North Dakota Department of Transportation becoming one of ten entities in the country with a federal designation in the Integration Pilot Program.

But, when you look at it there were really four factors that made North Dakota the Silicon Valley of Drones.

First, we are fortunate to have a strong congressional delegation championing UAS in ways other state congressional delegations have yet to match.

Second, it can be argued that the Grand Forks Air Force Base really has served as an impetus for North Dakota’s UAS ecosystem. The base has housed the venerable 69th Reconnaissance Group’s RQ-4 Global Hawks for almost a decade. The Grand Sky UAS drone park is attached to the Grand Forks AFB and is a national force in the UAS industry.

Third, history is being made in broad swaths at the Northern Plains UAS Test Site, which is one of seven test sites nationally. Northern Plains was the first site to fly and receive permissions to fly “Beyond-Visual-Line-Of-Sight,” referred to also by the acronym BVLOS.

Some of the work that Northern Plains has been doing with Xcel Energy here in North Dakota is pioneering as well. When it comes to UAS, Xcel is one of the most forward-thinking utilities in the country and was able to pull off a full-on partnership with the FAA for UAS integration. The Harris Corporation also has been an extremely important presence in North Dakota with their game-changing software and UAS radars.

And, finally, North Dakota also has the John D Odegard School of Aerospace Sciences at UND, which has the world’s largest aerial training fleet and was the first to offer a four-year baccalaureate UAS curriculum in the country. The collegiate drone racing championship is going to be held at UND this year and should be extremely interesting.

North Dakota’s uncongested airspace and distinctive four seasons are a couple of other reasons why UND started its aerospace school for manned aircraft, and also some of the reasons why people and organizations migrate to North Dakota for unmanned aircraft.

Our state’s UAS environment is a major part of why SkySkopes has grown to have offices in Grand Forks, Minot, Williston and Minneapolis. It is also a significant factor lending confidence to our pilots that our company’s geographical location in North Dakota is indeed the correct one.
Xcel Energy was one of the first energy companies to secure approvals from the Federal Aviation Administration (FAA) to conduct unmanned aircraft system (UAS) missions and is breaking new ground in the use of the technology. Xcel Energy was the recipient of the Technology Council of North Dakota’s 2019 Technology Innovator award for its innovative use of technology to serve its primary customer.

At Xcel Energy, UAS – commonly known as drones – are being integrated into operations to enhance public and worker safety, improve reliability to customers, and capture maximum efficiency gains. The company’s UAS Program Office works within the company to deploy the technology across operations. Some examples include inspections of transmission lines, substations, gas pipelines, power plant boilers, wind farm components and other applications.

Xcel Energy’s UAS “proof of concept” missions over the past four years have demonstrated that UAS technology can enhance inspection and maintenance processes, potentially reducing customer cost and improving response times.

Xcel Energy operates and inspects 320,000 miles of electricity and natural gas infrastructure, more than 1,400 substations, and dozens of power plants in its eight-state service area. While UAS are not expected to completely replace other inspection methods, they will be an essential tool. In a variety of circumstances, UAS have advantages over trucks, helicopters, or fixed-wing aircraft, and they provide improved safety for workers, greater efficiencies, and flights that are less intrusive to communities.

Prior to the FAA publishing rules for commercial use of drones, commonly known as “Part 107” the FAA granted individual exemptions and waivers that permitted limited drone operations within the operator’s line of site and within 400 feet of the ground. In 2015, Xcel Energy received the needed FAA permissions to fly research flights beyond those levels, becoming the first utility to conduct a “beyond the visual line of sight of the operator” UAS mission. Those flights provided valuable data that enabled Xcel Energy to secure more complex commercial approvals.

“The use of drones beyond the visual line of sight is a game changer for Xcel Energy, said Eileen Lockhart, UAS program manager. “This innovative technology is revolutionizing our work by improving the safety, efficiency and cost effectiveness of maintaining and protecting the grid for our customers.”

In addition to using drones to inspect important infrastructure, Xcel Energy has also worked to test and demonstrate how drones could be used following a disaster, reducing the time for emergency and utility crews to respond and restore power. In North Dakota, Xcel Energy worked closely with University of North Dakota, the Northern Plains UAS Test Site and many others as partners in researching possible solutions for such disasters. As a result of this partnership, Xcel Energy launched a live disaster response demonstration over the City of Mayville, North Dakota that coincided with the Drone Focus conference in Fargo during the summer of 2017. The research partnership includes Xcel Energy, the University of North Dakota, Elbit Systems of America, General Electric, Northern Plains UAS Test site, SkySkopes and others.

This conference also played a key role in North Dakota and Xcel Energy being selected to participate in the latest effort from the FAA on their Integration Pilot Program. This program is an opportunity for state, local, and tribal governments to partner with private sector entities, such as UAS operators or manufacturers, to accelerate safe UAS integration. Through this program Xcel Energy and North Dakota will focus on addressing safety issues and developing protocol for beyond visual line of sight flights, unmanned operations over people and night flights within urban environments.

“We’re excited to use drone technology to bring value to our customers by improving energy reliability and safety,” said Mark Nisbet, principal, Xcel Energy-North Dakota. “This work involves collaboration between public and private partners that will benefit the state, the economy, our customers and workers, and the environment for years to come.”

Xcel Energy is a Silver GNDC Cornerstone Member.
North Dakota’s history is linked with the development of the railroad. Its economy dependent upon transporting commodities to global markets using tracks that crisscross the state through cities, towns and open prairies. Generations of North Dakotans also have made a good living working for the Northern Pacific and Great Northern, and as those companies eventually became today’s BNSF Railway, many of their children and grandchildren still work to move the state’s goods by rail.

More than 1.8 million carloads of freight are moved by BNSF annually in North Dakota. That includes about 21 million tons of wheat, soybeans, corn, sugar beets and beans and other agricultural products to plants around the country for domestic use and to ports for export abroad. BNSF has helped relieve U.S. oil and gas transportation bottlenecks and will continue to be an important transportation solution for hauling Bakken crude safely and efficiently.

While trains hauling all of North Dakota’s goods may look similar to those operated generations ago, very little is the same besides steel wheels on steel rails. Today’s railroad deploys sophisticated technology across the state’s tracks to make train operations safer than ever.

Safety data continues to show that recent years have been the safest on record. Since 2000, the train accident rate is down 41 percent. The equipment-caused accident rate is down 34 percent. Track-caused accident rate is down 53 percent and the overall derailment rate is down 42 percent.

So, what’s driving down these rates? We’re leveraging technology in new and different ways to prevent incidents before they occur, while also using technology to conduct more efficient maintenance. Three areas where BNSF uses technology illustrate today’s high-tech railroad.
1) **Track Inspections and Maintenance:** BNSF rail detector vehicles use ultra-sonic waves to detect internal flaws in the rail that go unseen by the human eye. Track geometry cars measure the tracks’ surface under load for gauge, cross-level and alignment. We’ve recently added unmanned track geometry cars, nearly doubling the miles we can test.

For inspecting the ties that help make up the track structure, the technologies we now use can scan hundreds of miles of track each week compared to the time it would take to walk those miles. High quality photos from machine vision systems catalogue rail tie condition using algorithms. Combined with x-ray technology that indicates internal tie condition, the data help us predict how long a tie should last on a route. That allows us to be more precise in the ties that have to be replaced, and plan replacement in the future. Ground Penetrating Radar scans 16 inches below the rail to the substructure of track, informing when to clean and replace ballast.

BNSF engineering employees joined with our technology team to develop algorithms and models that predict when maintenance should happen. Rail wear data gathered from geometry cars’ laser technology is matched with ultrasonic readings from rail detector cars. That’s compared to the tonnage carried on a route and other factors. Together, the information informs our team when it’s the right time to replace the rail. This allows us to prioritize maintenance work on condition-based measurements, as well as schedule projects during the same time, minimizing the area and time needed to do the work.

BNSF is determining the viability of leveraging UAV technology for inspecting tall bridges or hard-to-reach towers using high-definition cameras and is the only railroad working with the Federal Aviation Administration to test flying UAVs beyond visual line-of-sight.

2) **Equipment Detectors:** Worn or cracked wheels, or problems with bearings can lead to mechanical-caused incidents. To prevent that, BNSF is using technology advancements including bionic-like detectors that can see, hear or feel issues that are beyond our human senses.

More than 4,000 detectors placed alongside the BNSF tracks monitor every locomotive and railcar across our network 24/7, creating a continuous stream of data. With more than 35 million readings every day, BNSF uses this data to determine the urgency of equipment repairs and spot trends that indicate when maintenance should happen.
Some of these detectors sense heat or feel the force of the equipment on the tracks, while others can hear defects on wheel bearings or cracks in wheels before they are visible. Through cameras and machine learning, certain detectors can see when parts are missing or something isn’t in the right position.

Depending on the level of alarm, a train crew will stop their train immediately. In these cases, the detector transmits a message over the radio, “talking” to the crew directly, as well as to the 24-hour Mechanical Desk in BNSF’s Network Operations Center.

It’s not just more detectors that are making the difference, it’s what we’re doing with the data. Using Big Data analytics, algorithms sort through more than 35 million readings every day and identify problems, and inform longer-term when maintenance should take place before an issue happens with equipment on the mainline. And we’re exploring processing more data right at the source as it’s gathered – this “edge computing” analytics will reduce to seconds the time an alarm sounds and action can be taken.

Beyond preventing incidents, how we use data from the detectors has transformed how we perform our mechanical work. What used to be time-based maintenance is now a more accurate and efficient money-saving condition-based maintenance program. The result is more rail traffic reaches its planned destination safely, with fewer interruptions along the route.

3) **Positive Train Control (PTC):** BNSF has completed installation of all mandated PTC infrastructure on its network, which includes our major routes through North Dakota. PTC is technology that overlays existing train hardware and software. Using GPS, Wi-Fi and high-band radio transmissions, PTC allows equipment onboard locomotives, wayside systems and a back office server to work together to determine a train’s location, direction and speed. The system warns the crew of problems and stops the train if needed.

As mandated by federal law, PTC is intended to prevent train-to-train collisions, derailments caused by excessive speed, unauthorized incursions by trains onto sections of track where maintenance activities are occurring, and movement of a train through a track switch left in the wrong position.

BNSF has invested more than $2 billion in its PTC implementation and is operating more than 1,000 trains a day with PTC protections as we continue to test and refine the complex system.

The heart of BNSF’s operations, connecting all the technology and people of the railroad, is our Network Operations Center, or NOC. On a floor the size of a football field, hundreds of train dispatchers communicate with freight and passenger train crews. Experts monitor and act on the information gathered from the trackside detectors, PTC systems, and train crews.

All of these technologies are turning our employees from finders into fixers, changing the way work is done today on the railroad. It’s transformed our railroad in North Dakota and across our network into a high-tech transportation operation that’s safer, healthier, and more efficient.

---

Amy McBeth is the director of public affairs for BNSF Railway, which is a GNDC Gold Cornerstone Member. McBeth also serves as on the GNDC Board of Directors.

---

**WE TAKE PRIDE IN ENERGIZING COMMUNITIES**

At Creedence Energy Services, making a commitment to our communities goes beyond the laboratory and oil fields. It means not only providing safe and reliable services throughout the Bakken region, but empowering our team to be actively involved, to volunteer and to invest in every market we serve. It’s a new energy and we can’t wait to share it with you!

INTERESTED IN ADVANCING ENERGY PRODUCTION THROUGH CHEMISTRY AND INNOVATION? CONTACT US TODAY FOR INTERNSHIPS AND FULL-TIME EMPLOYMENT.

WWW.CREEDENCE-ENERGY.COM/CAREERS
Technology is changing every aspect of how we live, work and play—and how we receive medical care is no different. It has changed the face of health care and not only influences but guides how we diagnose and treat our patients, leading to better outcomes and better quality of life. Breakthroughs in technology have challenged us to evaluate how we practice medicine by using cutting-edge tools to improve our ability to detect and treat diseases faster, more effectively and in a less invasive fashion. As health care changes, CHI St. Alexius Health is continually investing in the latest technology to serve our patients and enhance the medical care available in our region. Below are just a few ways technology has helped to shape how we serve our patients.

Stroke Ready
In the past, there were limited treatment options available for patients who woke up and experienced a stroke. These limitations were a result of not knowing exactly how long the symptoms had been present, making certain treatments too dangerous to use. Thanks to advances in medical techniques and technology, we have significantly increased the treatment options available, resulting in better outcomes—patients are less likely to die or become permanently disabled from a stroke.

Revolutionary Technology
CT and MRI images can now be seen with a level of detail like never before. RAPID is the most advanced and only validated cerebrovascular imaging platform available—expanding the treatment window for people who experience a stroke. The technology provides quick, easy-to-read, real-time views of the brain's bloodflow. On our state-of-the-art scanners, the software calculates a ratio of how much brain tissue is salvageable after a stroke. Whereas prior techniques took a
prolonged time to produce less useful data, reliable information is now available immediately, giving data that we can trust as we take action.

CHI St. Alexius Health Bismarck is the first and only hospital in North Dakota to implement the RAPID imaging platform from iSchemaView. The adoption of RAPID is setting the standard for advanced cerebrovascular imaging not only in Bismarck but worldwide. This platform was recently used to select patients for two landmark stroke trials published in The New England Journal of Medicine, with the trials showing real benefit in treating patients.

**Time is Brain**

On the basis of these studies, the American Heart Association and American Stroke Association recently approved new treatment guidelines. The prior treatment window for mechanical thrombectomy (clot removal) was six hours. However, based on this groundbreaking research, select patients with salvageable brain tissue identified through advanced imaging, such as provided by the RAPID platform, can benefit from a thrombectomy for up to 24 hours after stroke symptoms begin. This is significant not only for Bismarck but also for the rural communities across North Dakota that transfer their patients to CHI St. Alexius Health for care when time is critical.

**A New Standard of Care**

The success of these trials has led hospitals to re-examine and update treatment protocols, meaning that more people who suffered from an ischemic stroke are now eligible for life-saving clot removal and dissolving treatments with proper pre-procedure imaging. The stroke team offers expert emergency stroke care and is trained to stop – or even reverse – the effects of stroke. CHI St. Alexius Health Bismarck was the first designated Primary Stroke Center in North Dakota, and is proud to hold that certification today.

**Robots: The Wave of the Future**

One of the most exciting and fastest growing fields in health care is robotics. The use of robots in delivering health care is not just a concept in a movie, rather it is quickly becoming the future of medicine.

CHI St. Alexius Health offers the latest robot. The da Vinci® XI robot utilizes 3D endoscopy and offers an alternative to traditional open surgery and laparoscopic surgery.

The robot's “hands” allow the surgeon’s hand movements to be translated into smaller, precise movements through small incisions with the use of micro-instruments. The da Vinci XI surgical system consists of three major components: a patient side cart with four interactive robotic arms, a 3D, high definition endoscopic camera and video, and an ergonomically designed console where the surgeon sits while operating.
In many cases, robotic surgery results in less pain and is less invasive, using smaller incisions leading to minimal scarring. Robotic technology is revolutionizing the delivery of health care while improving the patient’s quality of life and minimizing the recovery time from surgery.

**Robot or Surgeon**

Understanding what role a robot plays in your surgery is important, especially for those who are skeptical of how technology has changed. Your surgeon still controls every aspect of the surgery with the assistance of the robot. The robot cannot be programmed or perform surgery on its own but rather it is an extension of your surgeon's hands enabling them to perform less invasive procedures with more precision. The use of this technology does not substitute for the skill of the surgeon, thus, it is important to choose a surgeon that has been trained to use this technology to achieve the best results.

**Inpatient Versus Outpatient**

Thanks to advances in medical techniques, anesthesia methods and technology more and more patients may be eligible to have surgeries and procedures performed in an outpatient rather than inpatient setting. For patients, the ability to recover from surgery in the comfort of their own home is very appealing.

Common procedures that are performed in an outpatient setting include gall bladder removal, rotator cuff surgery, sinus surgery, and many women's health surgeries. It is important to note that not all procedures qualify to be done in an outpatient setting, nor do all patients qualify.

Coordination of care has improved significantly across outpatient and inpatient settings enabling us to care for patients in various settings.

**Advances in Heart Care**

Today, permanent pacemaker implantation has become a routine procedure. It is safe for most patients, however, problems have been associated with the leads, venous access or the surgical pocket. A new technology, the Micra Leadless Pacemaker, is the newest and most advanced pacemaker available for patients with irregular heart rhythm disorders. Unlike traditional pacemakers, the Micra Leadless Pacemaker is completely self-contained and implanted directly into the heart where it gives off an electrical impulse to control the heartbeat while also eliminating the need for leads and a surgical pocket in the heart, reducing the chance for potential complications.

**Size and Effectiveness**

The Micra Leadless Pacemaker is the world’s smallest pacemaker available today. It is one tenth the size of a standard pacemaker, approximately the size of a large vitamin, taking up less space inside the patient’s body. The Micra Leadless Pacemaker offers many benefits in comparison to traditional
pacemaker options. The pacemaker is placed in the heart via a vein in the leg. Traditional pacemakers enter through a chest incision resulting in undesirable scarring. The advanced technology is MRI compatible and has been proven to not only minimize the chance of infection but also reduce the recovery time required after surgery.

Eligibility
The Micra Leadless Pacemaker is a good option for some patients, but not for all. It is important for patients to speak with their provider to see if a leadless pacemaker is a good option for them. CHI St. Alexius Health is the first hospital in the region to offer the Micra Leadless Pacemaker for patients.

Other Significant Advances in Health Care

Electronic Health Records
Electronic Health Records enable multiple clinicians to access records at the same time, compared to paper-based records with a single copy. Misplaced, misfiled, or lost charts are greatly reduced with the use of electronic storage improving the patient experience. EHR's enable providers to access multiple years’ worth of a patient’s medical history, resulting in a more thorough examination of previous health conditions, treatments and outcomes. Standardized entry of symptoms and results provide data consistency.

Data Mining Capabilities and Syndromic Surveillance
Technology has also enhanced our ability to detect, monitor and characterize regional outbreaks of illness and disease. Examples of how syndromic surveillance is utilized is tracking of foodborne illnesses and the ability to detect a surge in the number of seasonal illness such as influenza.

Cross-Functional Communication
The development of interfaces between medical systems has eliminated the need to manually enter data multiple times. The ability to better communicate has reduced the potential for errors, improving our ability to treat the patient more effectively.

Information Technology
In a means to provide the safest care possible, health care systems have been tasked with improving medication administration processes. The implementation of Information technology in the health care setting has proven to significantly reduced medication errors. Barcode scanning capabilities ensure the correct medication is administered to the right patient, in the right dose at the right time.

Health Care at Your Finger Tips
The development of electronic patient portals has made it possible for patients to play an active role in their overall health. Patient portals offer many features which include, but are not limited to, improving access to medical records, the ability to schedule appointments online, expanded provider-patient communication options and so much more.

Telemedicine
Technology has changed the way we deliver health care. Access to the internet on smart phones, electronic devices as well as new software has enabled providers and patients to communicate with ease and convenience, resulting in an upward trend in Telemedicine usage. The intent of Telemedicine is not to replace the patient-provider experience, rather to supplement the specialties available to patients, improving access to care especially in rural communities.

At CHI St. Alexius Heath we are committed to our core values of reverence, integrity, compassion and excellence. Technology has and will continue to play a large role in how we provide excellence through innovation. It is easy to see how it is transforming health care, but more importantly, technology is helping our providers save countless lives.

Kurt Schley is the president of CHI St. Alexius Health. Catholic Health Initiatives is a GNDC Platinum Cornerstone Member.

CHI St. Alexius Health
Imagine better health.

Kurt Schley is the president of CHI St. Alexius Health. Catholic Health Initiatives is a GNDC Platinum Cornerstone Member.

CHI St. Alexius Health is proud to be ranked as the safest hospital in North Dakota by LeapFrog. CHI St. Alexius Health Bismarck has also been recognized, five out of the last six years, as the Best Hospital for 2018-19 in North Dakota by U.S. News & World Report. CHI St. Alexius Health was also ranked as high performing in Geriatrics, Orthopedics, Pulmonology, Congestive Heart Failure, Hip Replacement and Knee Replacement.
LEGISLATIVE UPDATE

The 2019 North Dakota legislative session is now in the homestretch with a little over a month left for lawmakers to complete their work.

From GNDC’s perspective, and of immediate interest to North Dakota’s business community, the 2019 session has been largely defined by a legislative focus on infrastructure and workforce development. These two issues are central planks in GNDC’s legislative policy agenda and are vital to our state’s overall business climate. Fortunately, this session, legislators agree and have been working through a number of proposals that would effectively address on-going challenges related to these issues.

Of greatest significance is ‘Operation Prairie Dog,’ the proposal which will provide critical infrastructure funding for non-oil and gas producing counties across North Dakota. Previous legislative sessions have addressed immediate infrastructure needs related to energy development in many oil and gas producing counties. A recent Upper Great Plains Transportation Institute study estimated there is $14 billion in unmet infrastructure needs throughout North Dakota over the next 20 years. ‘Operation Prairie Dog’ paired with funding allocated for oil producing counties, proposes to address these needs. By any estimation, this legislation is a historic investment in modernizing North Dakota’s infrastructure.

GNDC regards ‘Operation Prairie Dog’ not as a first step but, rather, a giant leap forward, which is why we have so strongly advocated for its passage.

Progress on infrastructure and workforce development are essential to enhancing North Dakota’s business climate. Meeting these needs are seemingly more important now than ever before. GNDC is continuing to work diligently on these issues to ensure North Dakota remains a great place to do business.

Of the 270+ bills GNDC is tracking, the following report provides information on priority bills that are of the most importance to North Dakota’s business community. General business issues are always a priority of the GNDC and, as you will see in this report, we have strongly advocated against bills that would add regulations and mandates that would increase the cost of doing business. This is all part of our work as “Champions for Business.”
**HOUSE BILLS**

**Bill #1012**

The Department of Transportation appropriation includes $13 million of state funds to match Federal funds that are used for state highway improvements.

Passed, yes 71 nays 22, emergency clause carried.

**GNDC Support**

**Bill #1018**

The Commerce Department appropriation includes numerous economic development programs that benefit the state. GNDC is most interested in Operation Intern, Manufacturing Extension Partnership, and investments in UAS.

Passed, yes 67 nays 26, emergency clause carried.

**GNDC Support**

**Bill #1019**

The Career and Technical Education appropriation provides funding for technical education and training. As approved it does not include funding for career academies that were part of the Governor's budget.

Passed, yes 88 nays 1.

**GNDC Support**

**Bill #1020**

The Upper Great Plains Transportation Institute appropriation funds needed research of the state’s transportation infrastructure.

Passed, yes 79 nays 14.

**GNDC Support**

**Bill #1040**

The 21st Century Manufacturing Workforce Incentive reinstates the expired Automation Tax Credit and provides $1 million per biennium for a 20% tax credit on equipment and technology used to automate a manufacturing process.

Passed, yes 68 nays 22.

**GNDC Strong Support**

**Bill #1060**

This bill would assess a 3% to 10% surcharge to employers whose benefits have exceeded their contributions. The current fund is above target and if adjustments are needed it should be done through the rate structure.

Passed, yes 76 nays 13.

**GNDC Oppose**

**Bill #1062**

Adjusts the timeline for appointment of board members to the Workforce Safety and Insurance Board to better fit the legislative session.

Passed, yes 92 nays 0.

**GNDC Support**

**Bill #1066**

Provides transportation infrastructure funding for non-oil producing counties, cities and townships utilizing oil production tax. (Operation Prairie Dog)

Passed, yes 80 nays 12.

**GNDC Strong Support**

**Bill #1097**

Repeal Sunday retail closing laws to give business the option be open on Sunday mornings.

Passed, yes 56 nays 35.

**GNDC Strong Support**

**Bill #1106**

Establishment of a reinsurance pool for the individual health insurance market. This will bring stability to the health insurance market and could reduce premiums across the board.

Passed, yes 83 nays 10, emergency clause carried.

**GNDC Support**

**Bill #1111**

This would simplify state reporting requirements for the research and experimental tax credit. It would model the current federal alternative simplified method.

Passed, yes 86 nays 6.

**GNDC Support**

**Bill #1135**

As amended, lessens the requirement for signing a mobility impaired parking space. It also allows mobility impaired individuals to occupy two parking spaces if all the designated spaces are taken.

Passed, yes 88 nays 5.

**GNDC Oppose (neutral as amended)**

**Bill #1156**

Allows for short duration insurance coverage for travel, event cancellation and unmanned aircraft.

Passed, yes 88 nays 0, emergency clause carried.

**GNDC Support**

**Bill #1171**

HB 1171 was amended to the Skilled Workforce Loan Repayment Program. This program would utilize $5 from the Bank of North Dakota to repay loans up to one-third of the loan balance or $5,667, which ever is less. The program is still targeted towards in-demand technical careers and retention.

Passed, yes 83 nays 10, emergency clause carried.

**GNDC Support**

**Bill #1291**

Passed, yeas 93 nays 0, emergency clause carried.

**GNDC Support (as amended)**

**Bill #1193**

Failed to pass, yeas 26 nays 64.

**Bill #1247**

Failed to pass, yeas 25 nays 66.

**Bill #1291**

Failed to pass, yeas 7 nays 83.

**Bill #1317**

Failed to pass, yeas 15 nays 78.

**Bill #1333**

Failed to pass, yeas 17 nays 71.

**Bill #1485**

Failed to pass, yeas 10 nays 36.

**Bill #1493**

Passed, yeas 93 nays 0.

**GNDC Oppose (neutral as amended)**

**Bill #1480**

Passed, yeas 92 nays 0.

**GNDC Oppose**

**Bill #1509**

Passed, yeas 47 nays 0.

**GNDC Oppose**

**Bill #2012**

Passed, yeas 47 nays 0.

**Bill #2044**

Passed, yeas 47 nays 0.

**Bill #2209**

Passed, yeas 47 nays 0.

**Bill #2233**

Passed, yeas 47 nays 0.

**Bill #2319**

Passed, yeas 47 nays 0.

**Bill #2433**

Passed, yeas 47 nays 0.

**Bill #2509**

Passed, yeas 47 nays 0.

**Bill #2539**

Passed, yeas 47 nays 0.

**Bill #2593**

Passed, yeas 47 nays 0.

**Bill #2629**

Passed, yeas 47 nays 0.

**Bill #2653**

Passed, yeas 47 nays 0.

**Bill #2683**

Passed, yeas 47 nays 0.

**Bill #2713**

Passed, yeas 47 nays 0.

**Bill #2743**

Passed, yeas 47 nays 0.

**Bill #2773**

Passed, yeas 47 nays 0.

**Bill #2803**

Passed, yeas 47 nays 0.

**Bill #2833**

Passed, yeas 47 nays 0.

**Bill #2863**

Passed, yeas 47 nays 0.

**Bill #2893**

Passed, yeas 47 nays 0.

**Bill #2923**

Passed, yeas 47 nays 0.

**Bill #2953**

Passed, yeas 47 nays 0.

**Bill #2983**

Passed, yeas 47 nays 0.

**Bill #3013**

Passed, yeas 47 nays 0.

**Bill #3043**

Passed, yeas 47 nays 0.

**Bill #3073**

Passed, yeas 47 nays 0.

**Bill #3103**

Passed, yeas 47 nays 0.

**Bill #3133**

Passed, yeas 47 nays 0.

**Bill #3163**

Passed, yeas 47 nays 0.

**Bill #3193**

Passed, yeas 47 nays 0.

**Bill #3223**

Passed, yeas 47 nays 0.

**Bill #3253**

Passed, yeas 47 nays 0.

**Bill #3283**

Passed, yeas 47 nays 0.

**Bill #3313**

Passed, yeas 47 nays 0.

**Bill #3343**

Passed, yeas 47 nays 0.

**Bill #3373**

Passed, yeas 47 nays 0.

**Bill #3403**

Passed, yeas 47 nays 0.

**Bill #3433**

Passed, yeas 47 nays 0.

**Bill #3463**

Passed, yeas 47 nays 0.
LEGISLATIVE UPDATE

Bill #1184
This bill would restrict the general use of quick take eminent domain needed for some infrastructure projects.
Failed to pass, yeas 26 nays 64.
GNDC Oppose

Bill #1193
This legislation would keep the Federal minimum wage consistent across the state.
Passed, yeas 73 nays 20.
GNDC Support

Bill #1195
As amended this legislation would require additional renewable provisions to automatically renewable consumer contracts.
Passed, yeas 90 nays 0.
GNDC Oppose (neutral as amended)

Bill #1200
Prohibits a political subdivision from taxing or additionally regulating an auxiliary container (plastic bags, cups, straws, etc.).
Passed, yeas 72 nays 19.
GNDC Support

Bill #1247
This would lower the minimum WSI premium payment. Although this would potentially benefit some business sectors, others would potentially see an increase in premiums.
Failed to pass, yeas 22 nays 70.
GNDC Oppose

Bill #1291
Allows for permanent registration of semtrailers and farm trailers.
Passed, yeas 89 nays 0.
GNDC Oppose

Bill #1293
This bill would require employers to give one-day off per seven day work period if requested with no employer protections.
Failed to pass, yeas 17 nays 75.
GNDC Oppose

Bill #1305
This bill labeled the right to repair bill would require manufacturers to provide repair information, testing equipment, firmware access and repair parts to any repair provider.
Failed to pass, yeas 10 nays 82.
GNDC Oppose

Bill #1317
Property owners, lessee and tenants restricting the possession of a firearm or dangerous weapon may be held liable for injury or death on the property.
Failed to pass, yeas 19 nays 74.
GNDC Oppose

Bill #1333
As amended this bill would create an innovation loan fund of $3 million to support technology advancement.
Failed to pass, yeas 7 nays 83.
GNDC Support

Bill #1371
This bill would create a new hire registry mandate for independent contractors for child support. This requirement would be burdensome on employers who utilize independent contractors and further blurs the lines between employee and independent contractor.
Failed to pass, yeas 7 nays 83.
GNDC Oppose

Bill #1449 & #2336
These bills would have raise the oil extraction tax from 5% to 6.5%. North Dakota already has the 2nd highest effective oil tax in the country. This tax increase would have negatively impacted small producers and royalty owners the most.
HB 1449 -
Failed to pass, yeas 12 nays 76.
SB 2336 -
Failed to pass, yeas 10 nays 36.
GNDC Oppose

Bill #1450
An over 100% tax increase on the tobacco products tax rate for cigarettes. This would negatively impact distributors and petroleum marketers.
Failed to pass, yeas 25 nays 66.
GNDC Oppose

Bill #1456
Mental injury and pre-existing conditions that occurred or were triggered on the job would have been covered through Workforce Safety and Insurance. Finding the true source of these types of injuries is difficult and would have significantly increase employer premiums.
Failed to pass, yeas 17 nays 71.
GNDC Oppose

Bill #1475
An income tax deduction for employee education assistance provided by an employer.
Passed, yeas 77 nays 13.
GNDC Support
Bill #1480
A study to evaluate the creation of compressed natural gas fueling stations, creation of a compressed natural gas conversion fund, flaring reduction, and compressed natural gas motor vehicle excise tax.
Passed, yeas 87 nays 0.

GNDC Oppose

Bill #1484
Includes provisions for a paid family medical leave mandate. Protections already exist at the federal level. These types of programs are already being offered by employers.
Failed to pass, yeas 15 nays 78.

GNDC Oppose

Bill #1485
A study on best practices for consumer data protection.
Passed, yeas 93 nays 0.

GNDC Oppose

Bill #1493
The bills aims to improve privacy by restricting unmanned aerial system (UAS). Undue targeting to UAS that would impact our UAS industry in the state and laws are already in place to accomplish what this bill is looking to accomplish.
Failed to pass, yeas 36 nays 56.

GNDC Oppose

Bill #1509
This would institute a paid family medical leave mandate. Protections already exist at the federal level. These types of programs are already being offered by employers.
Failed to pass, yeas 17 nays 75.

GNDC Oppose

 SENATE BILLS

Bill #2012
The Department of Human Services appropriation contains Medicaid expansion. This program provides stability to insurance markets and limits premium increases.
Passed, yeas 45 nays 1, emergency clause carried.

GNDC Support

Bill #2021
The Workforce Safety and Insurance appropriation provides spending authority for the agency from the WSI fund. This agency provides care for injured workers and safety training while maintaining the lowest premiums in the nation.
Passed, yeas 46 nays 0.

GNDC Support

Bill #2039
This bill creates a skilled workforce scholarship program. $10 million from the Bank of North Dakota is matched with industry dollars towards tuition support for students who enter in-demand career fields.
Passed, yeas 46 nays 0.

GNDC Support

Bill #2044
Institutes a penalty for tampering with or damaging a critical infrastructure facility or a public utility.
Passed, yeas 42 nays 3.

GNDC Support

Bill #2191
Institutes sales tax policy for sellers located out-of-state.
Passed, yeas 46 nays 0.

GNDC Support

Bill #2209
Protection for records related to critical infrastructure and security planning, mitigation, or threats.
Passed, yeas 47 nays 0.

GNDC Support

Bill #2233
This bill would mandate insurers to cover expenses associated with certain healthcare benefits. The coverage would only apply to a limited number of individuals and is currently offered as option. This would significantly increase premiums over all.
Failed to pass, yeas 11 nays 35.

GNDC Oppose

Bill #2268
This would create a corridors of commerce program with up to $100 million in bonding authority for the NDDOT to use on the state highway system.
Passed, yeas 47 nays 0.

GNDC Support

Bill #2306
This bill would grant occupational licensure of military members and military spouses if they have practiced for two years our of the last for years. Also contains a provision to give a provisional license if they do not meet licensure board requirements.
Passed, yeas 47 nays 0.

GNDC Support

Bill #2319
This would restrict the use of indemnity clauses in oil and gas production contracts.
Failed to pass, yeas 7 nays 39.

GNDC Oppose
GNDC invited all local chambers from across the state to participate in Chamber Day at the State Capitol. Local chamber officials and representatives had booths in Legislative Hall where they visited with state legislators, officials, and the general public. The event was an opportunity for local chambers to showcase their community’s business climate while interacting with legislators on the importance of advancing policies that keep North Dakota open for business.

GNDC appreciates the involvement and partnership of these local chambers…

- Bismarck-Mandan Chamber EDC
- Bottineau Chamber of Commerce
- Devils Lake Area Chamber of Commerce
- The Chamber, Grand Forks-East Grand Forks
- Hettinger Area Chamber of Commerce
- Jamestown Area Chamber of Commerce
- Minot Chamber of Commerce
- Velva Chamber of Commerce
- Watford City Chamber of Commerce
- Williston Area Chamber of Commerce
On February 20, GNDC hosted Manufacturing Day at the State Capitol. Eighteen manufacturers and manufacturing partners from across the state attended the day-long event. Events such as this give participants the chance to display their latest innovations while visiting with legislators, policymakers, and the general public. Most importantly, manufacturers were able to network and advocate for pro-manufacturing policies that improve North Dakota’s economy.

GNDC is the state affiliate of the National Association of Manufacturers (NAM) and sponsors the North Dakota Manufacturing Council (NDMC).

GNDC appreciates the involvement and support of these North Dakota manufacturers and partners…

• AGT Foods
• Baker Boy
• Collins Aerospace
• Elinor Specialty Coatings
• Fisher Industries
• Killdeer Mountain Manufacturing
• MIDWEST AgEnergy
• Motor Coach Industries
• Steffes
• Stone Mill LLC
• Summers Manufacturing
• TMI
• Trail King
• WCCO Belting
• Impact Dakota
• Dream It Do It
• Bismarck State College (BSC)
• North Dakota State College of Science (NDSCS)
LOCAL CHAMBER SPOTLIGHT

By Craig Whitney, President & CEO

If there was just one word I could use to describe the Fargo Moorhead West Fargo (FMWF) metro, it would be growth. Our communities are witnessing growth in just about every area possible. Our population is booming, demographics are changing, businesses and schools are opening and expanding, and it seems every day a new amenity is added. It’s an incredibly exciting time to live, work and play here.

Let’s Talk Stats

We’re positive this number has significantly increased, but as of survey data from 2016, our MSA was estimated at 228,254 people. We’re trending younger too, with the median age just 32, no doubt driven by our large college population. Even Hector International Airport reported growth, seeing 10% more traffic in just one year.

FMWF is often featured in national news and lists, too.

• City of West Fargo named 10th best small town to live in America
• Livability: Let’s talk about how cool Fargo is
• Fargo in the 7 Most Recession-Proof Cities in the U.S.
• Fargo Best Place to Start Your Own Business
• Washington Post: You’re going where? Fargo!
• North Dakota is the crown jewel of the Internet in the Midwest
• Nation’s Best Job Market for 2018
• Fargo Ranks as Best City to Live on a $55,000 Salary
• Fargo makes fourth in list of best U.S. metros for its job market
• Fargo #6 safest city for women

Entrepreneurship and Tech

There’s no doubt about it: We’re big on entrepreneurship, start-ups and tech here. Organizations like Emerging Prairie, the Greater Fargo-Moorhead Economic Development Corporation, SCORE and the Small Business Association encourage entrepreneurial efforts, and much of the activity is even more grassroots.

Efforts like 1 Million Cups offer opportunities for entrepreneurs to gather, pitch ideas and collect feedback, and the Technology Incubator at the NDSU Research & Technology Park, and Folkways’ Co.Starters program continues to nurture startup businesses. Not to mention the numerous programs getting young girls involved in STEM.

At our State of Technology event last fall, Senator Hoeven excitedly reminded us of his vision for North Dakota to be as known for our tech entrepreneurship as we are for energy and ag. Throughout the event, several local innovators and keynote speakers, took the stage to share the amazing developments happening here, from wind, solar and nuclear energies, to drone piloting and more. One local employee of a tech success story, CoSchedule, emceed.

A Look at Our Workforce

The civilian labor force in FMWF is 134,359 with a participation rate of
74%. Average annual wages went up 2%, to $48,430, and the unemployment rate was 2.4% as of last summer.

The largest sector of workers was in health care and social assistance, employing 23,717 people, while the largest major occupation was office and administrative support, employing 22,198. Over the next year, employment is projected to expand by 2,074 jobs.

Much like most the rest of the state and nation, our members feel the shortage of qualified workers to fill job openings. When we polled our audience at State of the Cities, workforce was the top concern. That’s why we were part of a Regional Workforce Collaborative along with four other area organizations where we studied and proposed plans to address the issue. Our chamber is taking this issue seriously, and are doing all we can to solve the gap. It’s why we contributed to career academy funding at North Dakota State College of Science. It’s been put into our strategic plan and partnerships. It’s why we’re launching a new ground-breaking initiative called Fueling Our Future, in which one main objective will be to address the needs of people, employers, students and workers. Opportunities exist and will be pursued through a career academy, work and partnerships with educators, classrooms and k-12 outreach.

Local Issues

While our metro has many strengths, we also have many opportunities, and we intend to be at the forefront of those efforts. Our chamber is relentless in supporting our military, advocating for our members and for business through our public policy program, and monitoring the issues that affect our residents. In particular, we’re keeping a keen eye on workforce and flood protection.

We take our public policy work seriously, and feel it’s one of the best benefits we can give our members. Our staff and committee monitors key legislative issues and works with elected officials to influence policies that are beneficial for our membership and our metro.

We’re also championing a new groundbreaking initiative that will support a regional approach to growth and bring forth a metro mentality. This places a focus on workforce,
growth in jobs and capital, and asset improvement. Over the next several years, it will improve quality of life in the region with a view toward our next generation of citizens.

One of our tireless efforts has been backing the FM Diversion. We believe it is a critical project and the best way to protect our metro through permanent flood protection. Funding has been in flux, but we are thrilled to report that the project just had a big win by receiving approval of an increase in the federal participation from $450 million to $750 million, which is in line with new project estimates, and gets our community closer to completion.

In greater Minnesota, we are committed to protecting the funding mechanisms that allow border cities to remain competitive.

It was exciting to host several informative events with candidates and legislators leading up the recent mid-term elections and helping our community members get more involved.

Through the Honor Star program and Military Affairs committee, we were able to purchase Christmas wreaths for our state military cemetery in Bismarck, hosted events during Navy Week this past summer and took a small group to tour Camp Ripley in Minnesota. In addition, our 2018 Military Appreciation night at the RedHawks was once again a sell-out event. More than 1,000 military families were treated with an unforgettable night of baseball, complete with the U.S. Navy SEAL team of Patriot Parachuters delivering the flag for the National Anthem.

We also look for opportunities to assist the Happy Hooligans in any way that we can, especially where it is not covered in their limited budget provided by the United States Department of Defense. We support them in their recruitment efforts, and this has proved to show results through their significant positive change in recruitment numbers over the past year.

Chamber Updates
While our community is growing and changing, so is our chamber! In fact, our offices have never been busier.

Events
It feels crazy how many events we host throughout the year, but we also know that it’s vital community engagement, and important information for our members and community. In our last fiscal year, our team put on 75 total events (that’s one every 4.8 days!) with 16,000 attendees!

This January, we hosted our biggest event ever – one that far exceeded our expectations! Popular author and influencer Rachel Hollis spoke at our Women Connect anniversary celebration to a record crowd of nearly 4,000 people. Switching venues to accommodate the crowd was a new challenge for us, but also an incredible opportunity to reach a larger audience and show them what our women’s development programming is all about.

Aside from Women Connect and monthly Business Trainings, we host a monthly Eggs & Issues that exposes our community to timely topics from local experts and help keep them in the know. Just this past month Kathryn Burgum dropped in to a panel on mental health and addiction.

We take pride in our signature events, too. In particular, our Voices of Vision keeps growing and gaining popularity. Two years ago we even won a MACE Award for “Digital Campaign of the Year” for our marketing of the event with Shaquille O’Neal. This year will be our 10th anniversary of the series and
we have big plans lined up!

**Programs**

Our professional development programs contribute to the success and vitality of our workforce by developing strong leaders through targeted training opportunities and hands-on projects.

In fact, just this February we launched a brand-new program called Professionals of Color. We recognize that addressing the evolving demographic of our metro is fundamental to the growth and sustainability of our members. This program takes specific effort to serve the diverse populations that are underrepresented in current programming. A successful launch event was just held, and now we’re excited to kick off regular events and opportunities. The initial reception was very positive.

In other program news, we’re excited to host the first-ever Young Professionals Week in our community this summer. Our YPN committee and staff is diligently working on identifying speakers, venues, activities, programming and more.

The Young Entrepreneurs Academy is the only YEA! program in North Dakota, and transforms local middle and high school students into real, confident entrepreneurs. We’re in our fifth year of YEA! and have seen several successes already of our graduates entering the business world and launching incredible movements.

Last but certainly not least, Leadership Fargo Moorhead West Fargo has been a staple in the community for decades, and takes 40 individuals through the process of honing their leadership skills through exclusive talks and tours. A newer component the past few years has been Community Change Initiatives, where small groups launch efforts to positively impact non-profits or fill a niche. Recent projects included two Professionally Paired events, in which volunteers attended an open house that connected them to non-profits to donate their professional skills. The Commercial Action Recycling Group worked to get single-sort recycling into small businesses in Moorhead. One other group helped the Jeremiah program obtain 11 tablets for the mothers living in their home, in addition to helping them receive a Tech Spark grant.

**Other Chamber News**

We’re renewed in our membership efforts as well. Our staff is hard at work exploring new benefits and better ways to engage with current and potential members, and the greater community. We have to give a special shout-out to our amazing ambassadors who devote their time and talents to not just telling the Chamber story, but connecting with businesses to help them succeed.

Perhaps the most recent and exciting news as I type this is the launch of an all-new Chamber website. It’s been almost 10 years since our page had a new look, and we’re thrilled to finally update our online presence. It’s already been well-received and soon we’ll roll out more features to help members connect with each other and make the most out of their membership.

Things won’t be slowing down here anytime soon. We’re committed to getting it all right to best serve each and every one of our members and leaving a positive impact on our community’s residents and workforce. We’re dedicated to making our Chamber more diverse, strategic and future-focused. As industries evolve and communities grow, and so should chambers. Through these exciting activities, we can help build a better and stronger community and state.
The Greater North Dakota Chamber’s ND Chamber PAC is a non-partisan, pro-business political action committee that...

Supports state and federal candidates who support North Dakota’s job creators

Supports causes that protects free market principles

Advances policies to ensure North Dakota remains the best state in the nation to do business

Make your voice heard. Join other business leaders by contributing today and be part of our ND Chamber PAC Capitol Club.

To become a member, simply make a contribution of $141, or one dollar for each member of the legislative assembly.

Membership levels are:
- Capitol Club: $141 or more
- Capitol Club Captain: $250 or more
- Capitol Club Champion: $500 or more

Capitol Club members will receive a lapel pin and an invitation to an exclusive Capitol Club reception with lawmakers.

Your investment in the ND Chamber PAC will help GNDC amplify our voice, deepen our impact, and keep North Dakota open for business.

To learn more about the ND Chamber PAC or donate, log onto www.ndchamber.com or call (701) 222-0929
INCREASING THE MINIMUM WAGE:
FOCUS ON ECONOMICS, NOT POLITICS

By Marc Freedman, U.S. Chamber of Commerce

Let’s consider a thought experiment: What would happen if the federal government more than doubled the cost of a critical component of the economy like gasoline from the current national average of $2.25 to $4.66? Uproar, outrage, and perhaps even riots in the street (see “yellow vests” protests in France). Few would call that good economic policy.

Yet this seems to be what some have in mind when it comes to the minimum wage. The House Education and Labor Committee held a hearing on legislation that would increase the federal minimum wage from $7.25 per hour to $15.00 per hour. While one can have a legitimate conversation about the “right” minimum wage level, $15.00 would seem motivated more by politics than actual economics. The arguments against such a dramatic spike are well known, and supported by the bulk of economic research. These include:

- Small businesses do not have the resources to absorb such a dramatic increase in costs.
- A $15 wage will lead to reduced hours, fewer jobs created, cut backs in operations, and quite likely job losses.
- Increasing the minimum wage will require employers to raise the wages of millions of employees making between the current minimum wage and the new wage, not just those who are currently making the minimum wage, resulting in an impact far greater than advocates acknowledge.
- Increasing the minimum wage, which is effectively a starting wage level for low and unskilled workers, will freeze those workers out of the market as employers look for employees who can justify being paid the higher wage.

What has not received enough attention is the impact such an increase will have on charitable non-profits, which would be subject to this increase like any other employer. These are the groups providing aid and comfort to our neighbors and fellow citizens in their most dire hours of need. An increase like the one proposed would literally force them to cut back on the services they offer.

One economic data point that is impossible to capture is the job not created. When employers decide whether to create a new position, all the costs need to be lined up against what that new person can contribute to the enterprise. If the costs are too high, that job is never created. This decision making process happens in private and does not show up in any statistics.

Advocates for increasing the minimum wage frequently refer to this as an economic stimulus. This view actually reverses how the economy works. Economic growth is what allows employers to pay higher wages, not mandates from on high. And what we’re seeing in the economy now, higher rates of growth than in past years, is indeed being accompanied by companies announcing increased starting wage levels.

Rather than a political number that doesn’t work for most of the country, a smarter approach to the minimum wage is to seek a level based on economic data and to remember that the federal minimum wage is intended to set the floor. Finally, if legislators really want to see a minimum wage bill pass, it must include reforms of outdated laws and other provisions that will help employers deal with the cost.

Despite the advocates’ certitude about increasing the minimum wage to $15/hour, the debate on whether to increase the minimum wage, and by how much, is just getting started. Where it goes from here will be very interesting.

Marc Freedman is the vice president for employment policy for the U.S. Chamber of Commerce.
In his State of the Union address, President Donald Trump touted his trade policy that includes imposing tariffs on billions of dollars of imports into the United States. He said it’s to “defend American jobs and demand fair trade for American workers.”

What he didn’t say was Americans, such as farmers, are paying a steep price for them.

Increased agricultural production across the globe has depressed commodity prices, but the Trump administration’s trade fights have exacerbated farmers’ plights, The Wall Street Journal found:

Trade disputes under the Trump administration with major buyers of U.S. farm goods, such as China and Mexico, have further roiled agricultural markets and pressured farmers’ incomes. Prices for soybeans and hogs plummeted after those countries retaliated against U.S. steel and aluminum tariffs by imposing duties on U.S. products like oilseeds and pork, slashing shipments to big buyers.

Low milk prices are driving dairy farmers out of business in a market that’s also struggling with retaliatory tariffs on U.S. cheese from Mexico and China. Tariffs on U.S. pork have helped contribute to a record buildup in U.S. meat supplies, leading to lower prices for beef and chicken.

With exports making up 20% of farm income, according to the Department of Agriculture, these trade conflicts are crushing farmers’ finances:

Bankruptcies in three regions covering major farm states last year rose to the highest level in at least 10 years. The Seventh Circuit Court of Appeals, which includes Illinois, Indiana and Wisconsin, had double the bankruptcies in 2018 compared with
2008. In the Eighth Circuit, which includes states from North Dakota to Arkansas, bankruptcies swelled 96%. The 10th Circuit, which covers Kansas and other states, last year had 59% more bankruptcies than a decade earlier.

States in those circuits accounted for nearly half of all sales of U.S. farm products in 2017, according to U.S. Department of Agriculture data.

This has taken a personal toll:

For Nebraska farmer Kirk Duensing, filing for bankruptcy was a last resort, his only choice after several years of low corn and soybean prices meant too many bills he couldn’t pay.

Mr. Duensing has managed to keep farming, hiring himself out to plant crops for other farmers for extra income and borrowing from an investment group at an interest rate twice as high as offered by traditional lenders. Despite selling some land and equipment, Mr. Duensing remains more than $1 million in debt.

“I’ve been through several dips in 40 years,” said Mr. Duensing. “This one here is gonna kick my butt.”

And some tolls are more than financial:

Conversations with distressed farmers have become more frequent for Frank Friar, a retired agricultural lender who mans phones at the Wisconsin Farm Center. The organization advises dairy farmers and crop producers on financing options, bankruptcy and when to leave the farm behind. Last year, it received more than 2,300 calls, the most since 2010, and the center has hired more staff in the past two years.

About a dozen times a year, Mr. Friar and his colleagues talk with a farmer who seems to be contemplating suicide, he said. The center’s staff often calls family members or neighbors who can check on the farmers, and sometimes Mr. Friar drives out to farms himself. “The uncertainty, will they survive on the home farm, is [causing] more people to think negatively,” Mr. Friar said.

We saw the beginnings of this problem last year after countries imposed retaliatory tariffs in response to the U.S. Last summer, farmers were already losing thousands of dollars:

Dennis VanDaele is feeling the sting in Illinois. “It’s cost me 50 cents a bushel on about 25,000 bushels of corn,” VanDaele, who also grows soybeans on his Reynolds, IL, farm, told a local news station. All told, “it’s cost me $10,000 to $12,000,” he said of the tariffs. Going further east to Indiana, Larry Enders, who runs a 700-acre farm in southeastern St. Joseph County, says he has already lost about $23,000 on the value of last year’s harvest since the trade dispute began.

The financial stress, the insecurity, the fear of losing a farm that’s been in the family for generations, these are the effects of trade conflicts that look to have no end.

It’s a stark reminder that “Nobody ever wins in trade wars.”

Whether it’s farmers who sell overseas, small business owners who sell abroad, or companies that rely on imported materials to make their products, tariffs are imposing unnecessary pain. They’re the wrong approach to settling trade conflicts, and the administration should reverse course before more damage is done.

Sean Hackbarth is a senior editor and writer for the U.S. Chamber of Commerce where he focuses on public policies affecting businesses including energy, agriculture, health care, and regulations.
MEMBERSHIP MAKES A DIFFERENCE

GNDC MEMBERS ARE GETTING THEIR RETURN ON INVESTMENT NOW

By Christopher Kalash, GNDC Membership Services Director

Since becoming membership services director, I have been asked by members looking to renew their membership and by those thinking of joining the Greater North Dakota Chamber, this one question: “Why should I join GNDC?”

I can’t tell you how many times I’ve been asked “the question,” but I can tell you my first response. I always remind them that GNDC exists to advocate for the business community in North Dakota. To which they immediately respond by asking: “What does that mean?”

With that, I immediately proceed to my second response that goes something like this: “GNDC meets with our members and works with policy makers and legislators to develop an agenda that serves the interests of GNDC members and ensures North Dakota’s business climate is the best in the nation. Our e-newsletters bring you timely information. Our quarterly magazine shares stories about other members and spotlights our state’s business community. Also, our CEO Roundtables and annual Policy Summit offer educational and networking opportunities that helps you to grow personally and professionally.”

But, let me be honest: Even to me, my pitch sounds somewhat “canned.” Then the 2019 North Dakota legislative session began and I now have firsthand exposure to all the work we do for our members on a daily basis throughout the session.

Arik Spencer and Matt Gardner are at the State Capitol each day supporting, opposing or monitoring bills that have the potential to affect your bottom line. They attend more committee meetings than they can remember, offer testimony and talk legislators on why each bill is good or bad for our members. They are in close contact with other associations and form necessary alliances to assist in pushing legislation that will help our business community and trying to stop bills that will hurt North Dakota’s businesses.

GNDC was tracking 272 bills prior the deadline for bill submissions. At crossover time, we had already successfully stopped many bills that would adversely affect businesses. On the flip side, we helped to shepherd through a number of bills that will enhance workforce development, improve our business climate, and invest in infrastructure.

As a matter of fact, GNDC was successful with facilitating the passage or failure of 31 out of 32 bills by the time crossover occurred. If this was baseball, we would have a .969 batting average at the All-Star break. For details on the bills we tracked and how they fared, see our legislative update on page 26.

The work done by GNDC during the legislative session is the most visible benefit our members receive, but so much other work is done to lay the groundwork and prepare well in advance for those 80 days.

Throughout the summer, members met and worked on policy committees focused on business climate, infrastructure and workforce development. They shared ideas, researched issues and developed a list of priorities that formed the GNDC Legislative Agenda. This work allowed us to make suggestions of language to include in some of the bills that were submitted. Among these included bills relating to scholarships for in-demand occupations and infrastructure.

Measuring a return on investment is one of the most important of all business practices. During the legislative session, it is easier to see that return, and in the first half of this session GNDC has delivered. Benjamin Franklin said, “By failing to prepare, you are preparing to fail.” Preparing for the session by hosting our Policy Summit, working with our policy committees, and listening to our members has yielded the successes we have had and believe we will carry through to the end of the session. That is how GNDC fulfills its mission to ensure North Dakota’s business climate is the best in the nation.

Our work is not flashy. Unlike local chambers, we don’t cut ribbons. But often the new businesses that opened, and those that expanded, did so, in large part, because of a law GNDC supported, a tax credit we championed, a policy we fought to change, or a burdensome regulation we successfully repealed or stopped from being implemented.

This is what we do and that is why your membership not only matters, but it makes all the difference for our state.
New Store Location

Coburn’s Incorporated opened a new Cash Wise Foods location in north Bismarck in January. The new store is located near Ottawa Street and 43rd Avenue NE. Coburn’s Incorporated owns and operates Cash Wise Foods and Hornbacher’s stores in North Dakota.

Seeking to Ignite Student Interests

Late last year, Hess Corporation donated 8,000 toy trucks to North Dakota schools. The trucks are part of a STEM education curriculum kit the energy company provided for third, fourth, and fifth grade classes throughout the state. Mike Turner, Vice President for Production for Hess, says the company hopes the kits will ignite student interest which may direct them towards future job opportunities in STEM fields.

Making History

The North Dakota Public Service Commission (PSC) granted approval to Geronimo Energy to construct the state’s first ever commercial solar energy complex. According to the company and the Fargo Forum, the $250 million project will take up 1,600 acres and have a capacity of up to 200 megawatts. The site will be located in Cass County’s Harmony Township and will generate enough electricity to reduce carbon dioxide emissions by 240,000 metric tons. Construction is slated to begin later this spring and the site is expected to go into operation next year.

New Name for Grand Forks Manufacturer

Grand Forks-based PS Doors is now PS Industries. The company announced the change in December. According to the company, the new name more adequately describes its expanded product line. PS Industries originally began as a manufacturer of high quality industrial doors to one that today produces a range of all door types, roof hatches, building ventilation, and flood barriers.

It’s Now TC Energy

TransCanada Corporation has taken Canada out of its name. The company has been renamed TC Energy to better reflect the enterprise’s complete spectrum of services and operations. TC Energy was originally founded in 1951 as TransCanada Pipelines to bring natural gas to eastern Canada. The company is based in Calgary, Alberta.

Have a news item you’d like to share? Contact Membership Services Director Chris Kalash at (701) 222-0920 or at chris@ndchamber.com.
NEW & RENEWED MEMBERS

The Greater North Dakota Chamber is the only business association in North Dakota that advocates for companies of all sizes and industries. We lead the way in building the best possible business environment for our state. GNDC is pleased to welcome these businesses and associations who have joined our organization or recently renewed their membership.

New Members

Dane Chemco, Inc.  
JUUL Labs  
KPB Consulting, LLC  
Metro Area Ambulance Service, Inc.

Renewed Members

AARP North Dakota  
Ackerman-Estvold  
Advanced Engineering and Environmental Services, Inc.  
American Bank Center- Dickinson  
American Chemistry Council  
Andeavor  
Barr Engineering Co.  
Basis Electric Power Cooperative  
Baymont Inn & Suites  
Best Western Ramkota Hotel  
BNSF Railway Company  
Bottineau Area Chamber of Commerce  
Camas Sand and Gravel, LLC  
Capital City Construction, Inc.  
Cardinal IG Company  
Cargill, Inc.  
Caterpillar  
Central Sales, Inc.  
City of Jamestown  
Coborn's Incorporated  
ConocoPhillips  
Construction Engineers  
Creedence Energy Services  
Dakota Construction  
Dakota Medical Foundation  
Dakota Specialty Milling, Inc.  
Department of Career and Technical Education  
Dick Walsh Construction  
DuraTech Industries International, Inc.  
Economic Development Association of ND  
EDF Renewables, Inc  
Enbridge  
Essentia Health  
FARGODOME  
Farstad Oil Inc.  
Fiebiger, Swanson, West & Co., PLLP  
Fireside Office Solutions  
First Western Bank & Trust  
Forum Communications Company  
Forward Devils Lake Development Corp.  
GA Group, PC  
Go Wireline  
Goodnight Midstream  
Grafton Auto Electric, Inc.  
Great Plains Brokerage, Inc.  
Great River Energy  
H.A. Thompson & Sons  
Hazen Chamber of Commerce  
Hettinger Area Chamber of Commerce  
Hoffman Irrigation Inc.  
HUB Insurance  
Hugo's  
Jerome Distributing Inc.  
John Deere Seeding Group Valley City  
Johnsen Trailer Sales, Inc.  
Johnson, Robert E.  
K & H Electric Inc.  
Kilbourne Group  
Killdeer Mountain Manufacturing  
Kinder Morgan  
Kraus-Anderson Construction Company  
Loren Richards Inc./TurfMasters Plus/ Richards Excavating  
Major Mortgage  
Mandan Municipal Airport Authority  
Marathon Oil Corporation  
McNeilus Steel Inc.  
Media Productions  
Microsoft  
Miller Insulation Co. Inc.  
Mor-Gran-Sou Electric Cooperative, Inc.  
NDSU Research & Technology Park, Inc.  
NextEra Energy Resources, LLC  
Nexus Innovations, Inc.  
North Dakota Farmers Union  
North Dakota Guaranty and Title Company  
North Dakota Mill  
North Dakota School Boards Association  
Northern Improvement Company  
Northrop Grumman Corporation  
Northwest Contracting  
Odney  
ONEOK, Inc.  
Park Co. Realtors  
Petro Hunt, LLC  
Rasmussen College  
Roughrider Electric Cooperative, Inc.  
Sanders Metal Products, Inc.  
Scheels All Sports, Inc.  
SpartanNash  
Spectrum Aeromed  
Staiger Consulting Group  
Stantec  
State Historical Society of ND Foundation  
Stone Mill, LLC  
Target Logistics Management, LLC  
The Harms Group  
Trail King Industries, Inc.  
TransCanada US Pipelines  
Transystems, LLC  
Valley City Area Chamber of Commerce  
Verizon  
Walsh County Job Development Authority  
Waste Management  
Watford City Area Chamber of Commerce  
Weather Modification, Inc.  
Wells Fargo Bank - Fargo  
Welton Tire Service Inc.  
Widseth Smith Nolting  
Winn Construction, Inc.  
Wrigley Mechanical Inc.  
Xcel Energy
We are of this place, not just from it.

LIKE NOWHERE ELSE

In this place, we face challenges head on, believing that with community and commitment, we can build something better. Live healthier. Take care of each other.

This is our role in the story. With top physicians and providers, world-class technology and personalized care, Essentia Health helps you realize your best health where you live.

Schedule an appointment online at EssentiaHealth.org.

Essentia Health
Save The Date

Mark Your Calendars For These Upcoming Events

CEO Roundtable
May 8 – Minot

CEO Roundtable
June 19 – Fargo

2019 Policy Summit
September 10 – Bismarck

Register online at: www.ndchamber.com