

2025 SENATE WORKFORCE DEVELOPMENT

SB 2256

2025 SENATE STANDING COMMITTEE MINUTES

Workforce Development Committee Fort Lincoln Room, State Capitol

SB 2256
1/31/2025

Relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

9:02 a.m. Chairman Wobbema called the meeting to order.

Members Present: Chairman Wobbema, Senator Larson, Senator Boschee, Senator Powers. Members Absent: Vice-Chair Axtman.

Discussion Topics:

- One-time funding allocation
- Business model
- Convergence of Technologies to Solutions
- Justification for state funding
- Accountability

9:02 a.m. Senator Sorvaag introduced the bill in favor and submitted testimony #33132.

9:10 a.m. Brenda Wyland, CEO of NDSU Research and Technology Park, testified in favor and submitted testimony #33093.

9:31 a.m. James Cluff, COO for Solar Beyond, testified in favor and submitted testimony and submitted testimony #33103.

9:39 a.m. Jean Francois Legault, Associate Director for Carnegie Mellon University, testified in favor and submitted testimony #33095.

9:46 a.m. Jordan Kannianen ND Industrial Commission, testified in neutral.

Additional written testimony:

Gregory Syrup, Managing Director, 701 Fund, submitted written testimony in favor #33108.

Amy Whitney, Director of UND Center for Innovation, submitted written testimony in neutral #33092.

Holly Anderson, CEO and Founder of Elinor Coatings LLC, submitted testimony in favor #33087.

Matt Dunlevy, Ceo and President of ND UAS council, submitted written testimony in favor #33079.

Tony Grindberg, State Director Xcel Energy, submitted written testimony in favor #32844.

Frank Matus, Director of Thales USA Inc., submitted written testimony in favor #32543.

Shannon Full, President and CEO, FMWF Chamber, submitted written testimony in favor #33133.

9:49 a.m. Chairman Wobbema closed the hearing.

Andrew Ficek, Committee Clerk

January 31, 2025

Speaker Frank Matus, Director UAS Integration, Thales USA, Inc. & Chair of the North Dakota UAS Council

Reference: Testimony in Support for Senate Bill 2256 – Research and Technology Park Fund

Testimony:

Mr. Chairman and esteemed members of the Committee, thank you for the opportunity to testify in support of SB2256. I am testifying in SUPPORT of this legislation for the ongoing appropriation to support the research technology park fund.

The great State of North Dakota is blessed to have several innovative activities surrounding autonomous systems advancements, whether it be for agriculture, energy or specific to the UAS sector. We are dually blessed to have strong government and industry partners driving innovation within our state. Our higher-education system, particularly the University of North Dakota, which administratively houses the Northern Plains UAS Test Site and the Vantis Program, and North Dakota State University, home to advanced robotics and artificial intelligence applied research, are two differentiating forces increasing our reach as industry and leadership in diversifying the State's economy. I am writing in support of the establishment of a research technology park fund to continue to advance critical innovation across this emerging technology sector.

The Research Technology Park at NDSU is one of remaining components to round out the North Dakota autonomous systems ecosystem. Today, we lack a specific entity and location where technologies in the fields of autonomous mobile equipment, robotics, and artificial intelligence coming from the university systems meet partners and investors in private industry and/or the DoD sector. These technologies are pivotal to the continued growth of North Dakota's agricultural sector, as well as its expanding defense and technology industries. The bill directs funding towards product solutions that will not only advance these industries but also create a center to fast-track those solutions into the market.

This bill is a critical step towards ensuring that North Dakota remains at the forefront of technological innovation, driving economic growth and job creation for years to come. I urge you to support the passage of this legislation.

Thank you for your time and consideration. If you have any questions or would like to discuss this matter further, please do not hesitate to contact me.

Regards,

Frank Matus

Director, UAS Integration, Thales USA, Inc.

Fargo, ND



P.O. Box 2747
Fargo, ND 58108

January 31, 2025

Testimony SB 2256-North Dakota Senate Workforce Senator Wobbema, Chairman and Members of the Committee

My name is Tony Grindberg, State Director for Xcel Energy and I am honored to provide testimony today on behalf of the NDSU Research & Technology Park (RTP). ***The RTP has created a new agile and focused business model emphasizing the productization of intelligent autonomous mobile equipment.*** Xcel Energy strongly supports Senate Bill 2256 as a critical step toward advancing the RTP and bolstering North Dakota's leadership in emerging technologies that are then converted into products for the benefit of the commercial market and military. Established 25 years ago, the RTP has a longstanding history of fostering innovation, with Xcel Energy as the first company to financially support the technology incubator. SB 2256 will leverage this history and facilitate the following key objectives:

Focus on Autonomous Technology: The RTP envisions a future centered on robotics, artificial intelligence (AI), and autonomous systems, particularly intelligent mobile equipment. This initiative will position North Dakota at the forefront of technological innovation and leadership in autonomy with numerous economic benefits.

Translating Discovery into Societal Benefit: The RTP serves as a vital bridge between groundbreaking research and real-world applications. By fostering an environment where innovative ideas are transformed into tangible societal benefits, we ensure that North Dakota remains competitive in the ever-evolving global landscape.

Economic, Security, and Workforce Benefits: The RTP contributes significantly to North Dakota's economy by attracting high-tech industries and fostering manufacturing productivity. Additionally, these initiatives help address critical workforce skill gaps, ensuring that North Dakotans are prepared for the jobs of tomorrow.

Advancing North Dakota's Autonomy Leadership: With its strong emphasis on intelligent autonomous mobile equipment, the RTP solidifies North Dakota's position as a leader in this transformative field. Our efforts align with national priorities in autonomy, reinforcing our state's reputation as an innovation hub.

Transformative Potential and Job Creation: The RTP initiative has the power to create substantial economic impact and generate numerous high-quality jobs.

In conclusion, supporting SB 2256 is an investment in North Dakota's future. The RTP is committed to fostering technological innovation, driving economic growth, and solving industry problems. We urge the committee to advance this legislation to ensure that North Dakota remains a leader in the rapidly evolving landscape of autonomous technology and product development.

Thank you for your time and consideration. I am happy to answer any questions the committee may have.

Sincerely,

Tony Grindberg

Xcel Energy



975 58th Ave South, Grand Forks, ND 58201 | 218.791.1089 | stacey@nduas.org

Senate Workforce Committee
North Dakota State Capitol
600 E Boulevard Ave
Bismarck, ND 58505

Subject: Testimony in Support of SB2256 – Appropriation for NDSU Research and Technology Park

Chairman Wobbema and Members of the Committee,

I am writing to express my strong support for Senate Bill 2256, which appropriates \$20 million to the North Dakota State University (NDSU) Research and Technology Park (RTP). As the President and CEO of the North Dakota UAS Council, I recognize the critical role RTP plays in fostering innovation, economic growth, and workforce development in our state. This investment will strengthen North Dakota's leadership in autonomous technology and provide significant benefits to our economy and national security.

The RTP's vision is centered on robotics, artificial intelligence, and autonomous technology, particularly intelligent mobile equipment. This funding will enable North Dakota to remain at the forefront of these rapidly advancing fields, ensuring our state remains a national leader in autonomy development and product creation.

One of the RTP's key strengths is its ability to translate discovery into societal benefit. Innovation is only as valuable as its real-world applications, and the RTP serves as a critical bridge between cutting-edge technological advancements and their practical implementation. By fostering collaboration between academia, industry, and government, RTP ensures that these innovations lead to meaningful products and solutions that benefit society, industry, and our economy.

Furthermore, investing in RTP will yield economic, security, and workforce benefits. As automation and AI transform industries, North Dakota must address emerging skill gaps to ensure our workforce remains competitive. RTP's initiatives will support job creation, workforce training, and the advancement of autonomous technologies that enhance our manufacturing productivity, security, and economic resilience.

This investment is not only about supporting an innovation hub; it is about advancing North Dakota's autonomy leadership. By strengthening our commitment to air and ground autonomy, RTP will drive advancements that position North Dakota as a global leader in autonomous technology, attracting businesses and talent to our state.

The transformative potential and job creation tied to this initiative cannot be overstated. With RTP's capabilities, this investment will drive economic impact across multiple sectors, from agriculture and defense to logistics and energy. The RTP has the potential to create high-paying jobs, stimulate private sector investment, and enhance North Dakota's technological competitiveness on a national scale.

For these reasons, I strongly urge your support of SB2256. The funding will ensure the RTP continues to drive innovation, economic prosperity, and workforce development, securing North Dakota's place as a leader in autonomous systems and next-generation technology.

Thank you for your time and consideration. I appreciate the opportunity to provide this testimony and am happy to answer any questions the committee may have.

Very respectfully,

Matt Dunlevy
President & CEO



Testimony by Holly L. Anderson
In Support of SB2256 Funding for the North Dakota State University Research Technology Park Fund
to the North Dakota Senate Workforce Development Committee
January 31, 2025

Esteemed Chair and members of the Workforce Development Committee:

I am testifying in SUPPORT of SB2256.

Since 2014, Elinor Coatings has been headquartered at the NDSU Research and Technology Park (RTP) in Fargo. As a business owner who has received critical support and benefited from the existence and programming of the RTP, **I urge you to fund this important component of our state's rapid growth in innovative and commercially-viable robotic and AI-powered technologies, companies and workforce.**

In 2014, Elinor had two co-founders sharing one office in the Business Incubator of the RTP and an incredible mountain of financial, technical, regulatory, and workforce challenges ahead of us in order to successfully commercialize and grow a new company based on world-class, but home-grown, coatings research happening at NDSU.

Over the past 12 years, our tiny company in the back hallway of the RTP grew to 30 full-time, highly educated employees working in five laboratories on multiple multi-year Department of Defense research contracts to develop anti-corrosion coatings for air and ground vehicles for the Air Force and Army. We recently launched the Aurora Center for Extreme Weather Materials to expand our capabilities in North Dakota for extreme weather testing, manufacturing and coatings application.

In addition to year-over-year workforce growth, we hire up to 10 engineering, chemistry, polymer and computer science interns each year and work with our state's universities to access subject matter experts, advanced laboratory testing, and promising technologies ready for commercialization.

We have accomplished this growth as tenants of the RTP, where we remain. We support the expansion of the RTP into becoming a hub for advanced robotics, artificial intelligence applied research and a bridge between academia, industry, and the Department of Defense. Our advanced materials laboratory can greatly benefit and collaborate with robotics and AI to create high throughput formulation and materials development and create solutions for our customers related to specialty manufacturing and autonomous coatings application and evaluation.

The RTP can be an even more valuable technology hub and accelerator, but unless it is funded for rapid expansion, Elinor will likely outgrow the space and capabilities, and this exciting opportunity to foster robotics and AI it is offering may not have the rocket fuel it needs to succeed.

Please support business owners like me and all future innovators by funding a vision for North Dakota that embraces the most patriotic of actions: celebrating research and technology through a place that encourages applied mathematicians, scientists and engineers to create a future that is secure, resilient, capable and offers workforce opportunities for the next generation of innovative North Dakotans to thrive.

Respectfully submitted,
Holly Anderson, CEO
Elinor Coatings, LLC
1805 NDSU Research Park Dr N
Fargo ND 58102
www.elinorcoatings.com



Testimony of Amy Whitney
SB 2256
January 31, 2025

Chairman Wobbema and Members of the Senate Workforce Development Committee:

Thank you for the opportunity to provide testimony on SB 2256 regarding a research and technology park fund. For the record, my name is Amy Whitney, Director of the UND Center for Innovation. I have been fortunate to serve in this role for six and a half years. My goal is to provide information about related work we have done at the University of North Dakota. I believe this will be helpful as you consider the increased impact that NDSU's technology research park can have through this type of funding.

I see huge value in North Dakota's investment in the areas of autonomy and defense. Furthermore, I foresee an amazing collaboration opportunity between NDSU and UND with this type of funding as it capitalizes upon the expertise and infrastructure that exists at both universities. UND and Grand Forks have a robust UAS and autonomous systems ecosystem, and it is widely recognized as one of the most comprehensive in the nation. At the same time, it is important to avoid unnecessary replication, and we should always look for ways to foster stronger partnerships.

This investment can pay dividends to North Dakota. This statement is based on my experience and the Center for Innovation's proven track record of successfully launching businesses and fostering startups for the past four decades. We manage more than 11,000 square feet across two facilities. Every day, Center staff facilitate connections between companies and UND talent in the fields of autonomous systems, defense, health care, and more. We also make significant contributions to North Dakota's economic growth. Presently, our 74 member companies employ more than 200 people. Furthermore, through a five-year federal grant, we supported 21 autonomous system companies that created 96 jobs, 40 internships, raised over \$39 million in capital, and earned more than \$5 million in revenue. The Center's InternGF program, in conjunction with the Grand Forks Economic Development Corporation, provides internships for students at local startups and achieves a notable 60% retention rate of students transitioning into high-paying positions in North Dakota. This results in an average annual increase of \$382,000 in wages earned. The Center for Innovation



generates substantial long-term economic impact in North Dakota, and the same is possible at a place such as the NDSU Research Technology Park.

This work comes at a cost. 40% of the UND Center for Innovation's operating budget is covered by an array of funding sources, including federal and state grants, donations, and fee-for-service activities. The other 60% of our operating budget is funded by the University of North Dakota.

When considering SB 2256, I believe it is important to recognize the opportunity to have both NDSU and UND involved in this important work. This can be accomplished by identifying UND as a partner in Section 1, paragraph 4 of the bill. This addition codifies a partnership between the state's two research universities, encourages continued collaboration, and ensures that North Dakota leverages its full research and innovation potential. Further, it strengthens the state's position as a leader in autonomous systems and defense applications while avoiding unnecessary duplication of resources and effort.

Thank you for your consideration and the opportunity to share this information with you.

NDSU

RESEARCH AND TECHNOLOGY PARK



Mr. Chairman and members of the committee, I'm Brenda Wyland and I serve as the CEO of the NDSU Research and Technology Park in Fargo located on NDSU's campus. I'm here today testifying in strong support of SB2256. This bill requests \$20 Million to support the new vision and path forward we are going to share with you today.

This is my return to the Research Park. I was with the Park from 2008-2013. Prior to my return to the Park, I spent the last 10 years in the private sector working for a fast-growth technology company primarily focusing on starting and leading our government and defense division before jumping back over to the precision ag side of the business.

A little over a year ago, I was recruited back to the Park to create a bold new vision and business model.

We intentionally started with a few goals in mind. We didn't want to duplicate key assets in the State like Grand Farm, Grand Sky, or the Northern Plains UAS Test Site. Instead, we wanted to find a way to leverage them and contribute to their success in a meaningful way.



PROBLEM STATEMENT

North Dakota State University (NDSU) is a leading educational and research institution but is not positioned to convert research discoveries into commercial products that support the rapidly evolving needs of industry.

OPPORTUNITY

Emphasize the productization of *intelligent autonomous mobile equipment*.

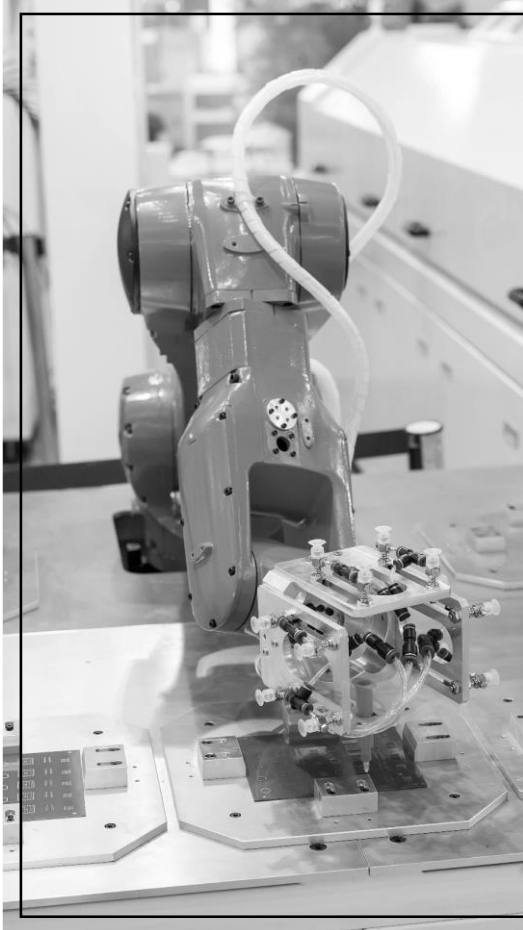
Connect world class engineers and researchers in six specific technology areas to the needs of industry.

Bridge the needs of the global marketplace with the convergence of technologies to solutions.

NDSU RESEARCH & TECHNOLOGY PARK

We also spent time looking at the role of the University and that of the Park. NDSU is a leading educational and research institution, but, like many other Universities, it is not positioned to convert those discoveries into commercial products. However, if we were to optimize that capability, think of the significant impact we could have on the economy.

As a result, the Park created an agile and focused business model that's going to focus on intelligent autonomous mobile equipment. We'll talk more about this in a minute. Further, we are connecting engineers to six specific technology areas directly related to the needs of industry. Thus, enabling us to bridge the gap between discovery and societal benefit.



BUSINESS MODEL

We create solutions that solve global problems then transition those products into the market.

Revenue generated by our engineering projects and product solutions is reinvested to ensure our mission thrives.

Our model will serve as a catalyst to drive growth for the State of North Dakota

NDSU RESEARCH & TECHNOLOGY PARK

The next thing we focused on was creating a new business model, one that was going to allow us to become profitable and continue to reinvest those profits into funding our core operations in future years. ***This model will create multiple revenue streams by engaging in contracts directly with the commercial market and military to design, engineer, and test advance automation and robotics prototypes.*** As we move through my testimony, you'll hear about future plans to move beyond prototyping along with how we are going to build the expertise to do so.

SUCCESSFUL BUSINESS MODELS



- ✓ Rapid proof-of-concept and in-depth development and testing
- ✓ \$800 million in Sales
- ✓ 27 years of making robotics a reality
- ✓ 850+ individual inventions
- ✓ 120 start-ups



- ✓ Rapid proof-of-concept, prototyping and commercialization
- ✓ 80 years of innovations
- ✓ 13,000 patents filed (100+ active licenses)
- ✓ 50+ spin-off companies/30+ start-ups in portfolio



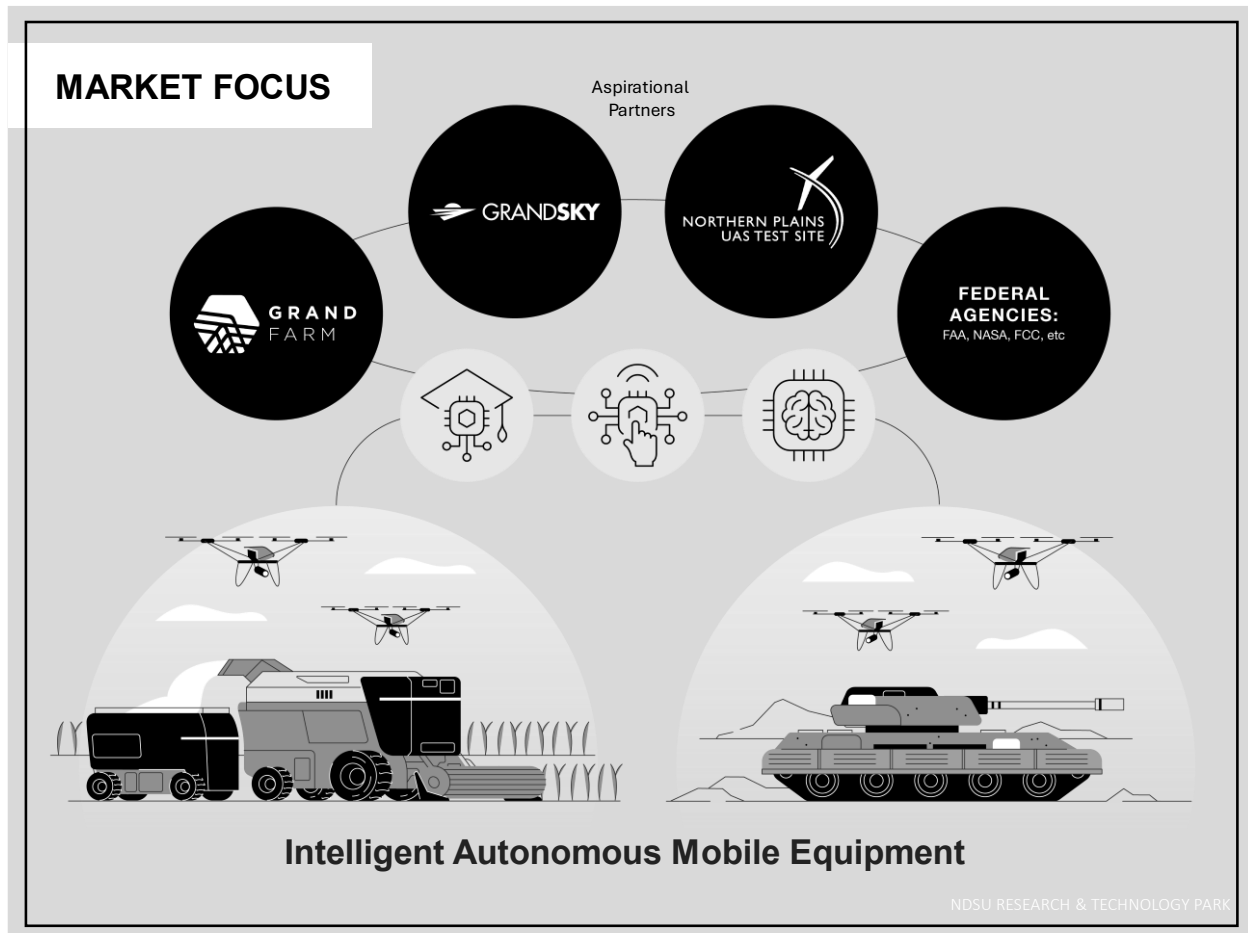
- ✓ \$40 million hypersonic and applied research facility
- ✓ Single location for industry partners to work on materials and manufacturing innovations and test capabilities
- ✓ Vertically integrated prototyping center to design and manufacture
- ✓ Opened June 6, 2023

NDSU RESEARCH & TECHNOLOGY PARK

As this business model started to take shape, we began looking into whether others were doing similar activities. It turns out that yes, a few are. For example, Carnegie Mellon's National Robotics Engineering Center (often referred to as NREC) has core functions like what we are going to start doing. As you can see on this slide, they conduct rapid proof-of-concept and in-depth development and testing. They have been highly successful with their model generating \$800 Million in Revenue over the years.

SRI stands for the [Stanford Research Institute](#). They also conduct similar activities but do go beyond into other means of commercialization activities. Both NREC and SRI have had significant start-ups created and spun out because of their model.

Finally, Purdue University. Last summer they opened a manufacturing innovation and test center. They are a vertically integrated prototyping center that will go beyond that stage and into manufacturing.

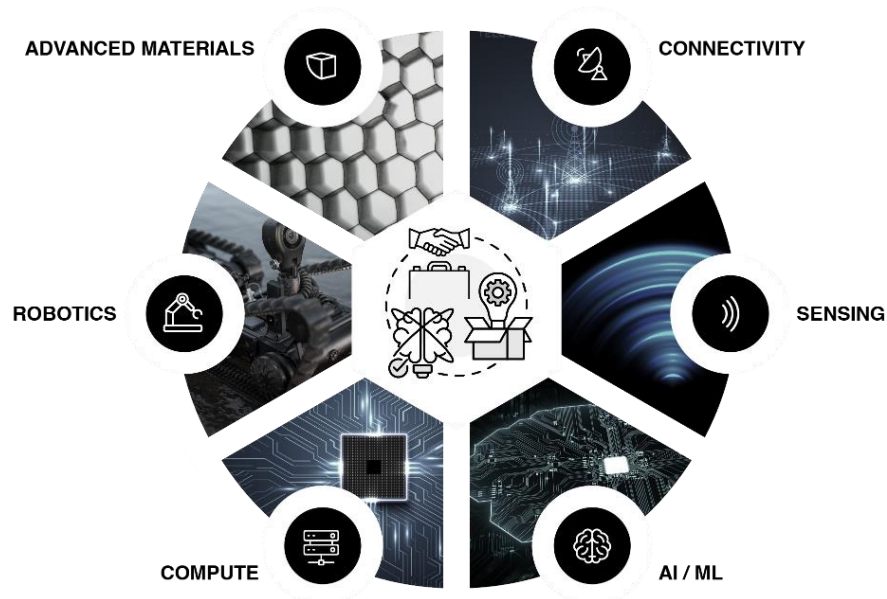


While our vision and business model were starting to take shape, we turned our attention to market focus. We can't be everything to everyone, so we are focusing on the precision ag and defense markets. The technical problems that exist in making a ground and air system work seamlessly are the same in precision ag and defense. You wouldn't necessarily know that unless you spent time working in both industries like me and my Chief Technology Officer have.

An underlying enabler is also the Energy market. To do the types of activities we are going to talk more about we need power – computational power – which means we need Energy Innovation. ***We want to compliment the work the EERC is doing by focusing on robotics and AI to advance that industry while they continue the great work they are doing in energy and geology.***

Also, as you can see, we want to leverage the environmental test capabilities that exist in the State. We have no intentions of duplicating those efforts but instead leveraging them.

CONVERGENCE OF TECHNOLOGIES TO SOLUTIONS



NDSU RESEARCH & TECHNOLOGY PARK

To develop intelligent autonomous mobile equipment, we needed to identify the key technologies that we were going to build a team and industry expertise around. As you can see by this slide, when you peel back the technical layers of what goes into developing autonomous equipment, key technologies rise to the top. They need to be connected to networks to enable them to work in all kinds of different environments. They need to be able to sense and think. We need to leverage AI as a tool to give them utility or purpose so they can perform specific tasks and so forth.

Recently, I hired Josh Gelinske to serve as the Park's Chief Technology Officer. He brings significant technical expertise in several of these areas like connectivity, sensing, and artificial intelligence. He's now tasked with developing a high-caliber, high-performing team of engineers and industry experts to begin working on contracts and/or our own products. You'll hear more about our model in just a minute.



CARNEGIE MELLON UNIVERSITY NATIONAL ROBOTICS ENGINEERING CENTER



- World leader in engineering robotics solutions for agriculture, defense, mining, automotive, and energy.
- Develop and mature robotic technologies from concept to commercialization.
- Rapid proof-of-concept demonstration followed by in-depth development and testing.

\$800

Million in Sales

27Years of Making
Robotics a
Reality**350+**Projects
Successfully
Delivered**850+**Individual
Inventions**160+**Robotics
Experts

✓ Targeted robotics partner

✓ Access to technical expertise in world-leading robotics

✓ Highly respected reputation

✓ Acceleration of Park's vision and strategy

✓ Intellectual property policies and procedures already
accepted by the private sector and military

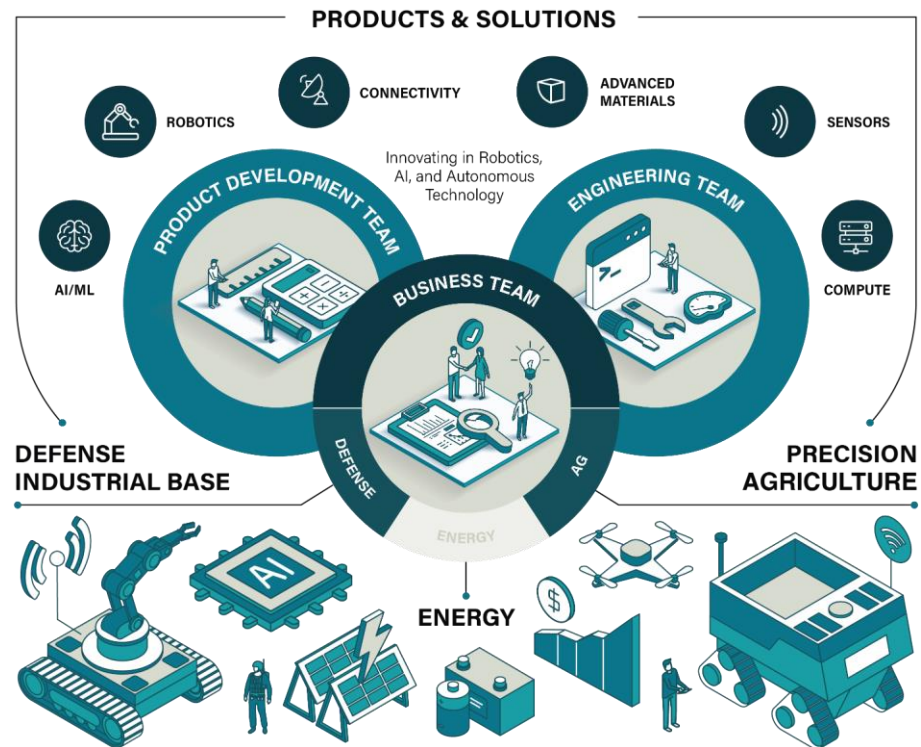
NDSU RESEARCH & TECHNOLOGY PARK

Back in February of last year, we reached out to Carnegie Mellons' National Robotics Engineering Center as we wanted to visit and learn more. As time progressed, we discovered they were looking for a strategic partner. They also see what we see and want further diversification in precision ag and defense.

We have since entered into a Letter of Intent with NREC and are in the process of working through a collaborative agreement with them. Mr. Jeff Legault, Associate Director, NREC will follow with testimony and explain NREC's support of this project.

Win-Win Partnerships. NREC brings significant technical expertise to the table in niche areas. They are a highly respected global leader in robotics, having deployed robotics on every continent around the world. In addition, you don't generate the level of Revenue that they have without having figured out the IP strategy to engage with the commercial market and military. All of this will enable us to accelerate our vision. In turn, NREC has access to complimentary technical skills in areas they have an interest in, a strategic partner to collaborate with on federal programs, and a fast-track to further market opportunities.

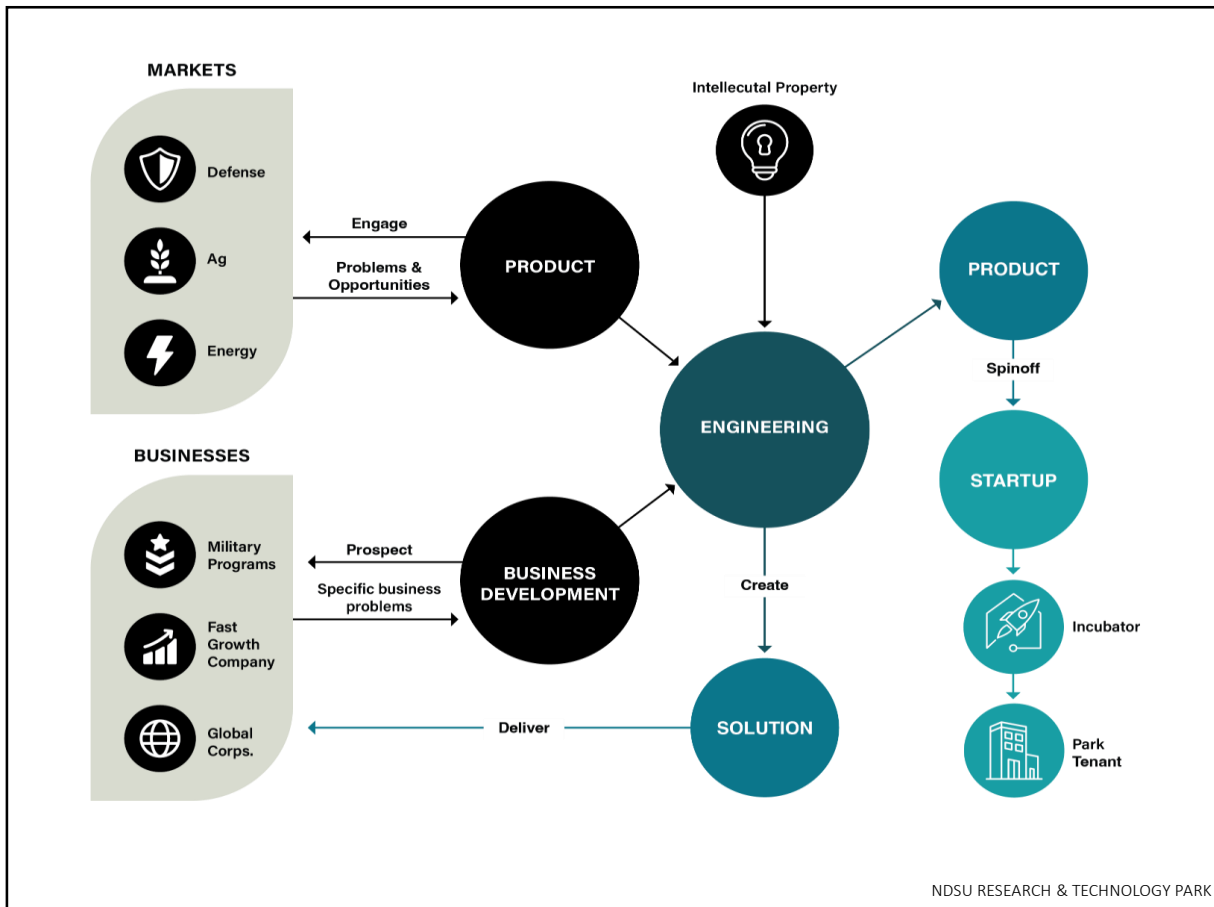
OUR ECOSYSTEM



NDSU RESEARCH & TECHNOLOGY PARK

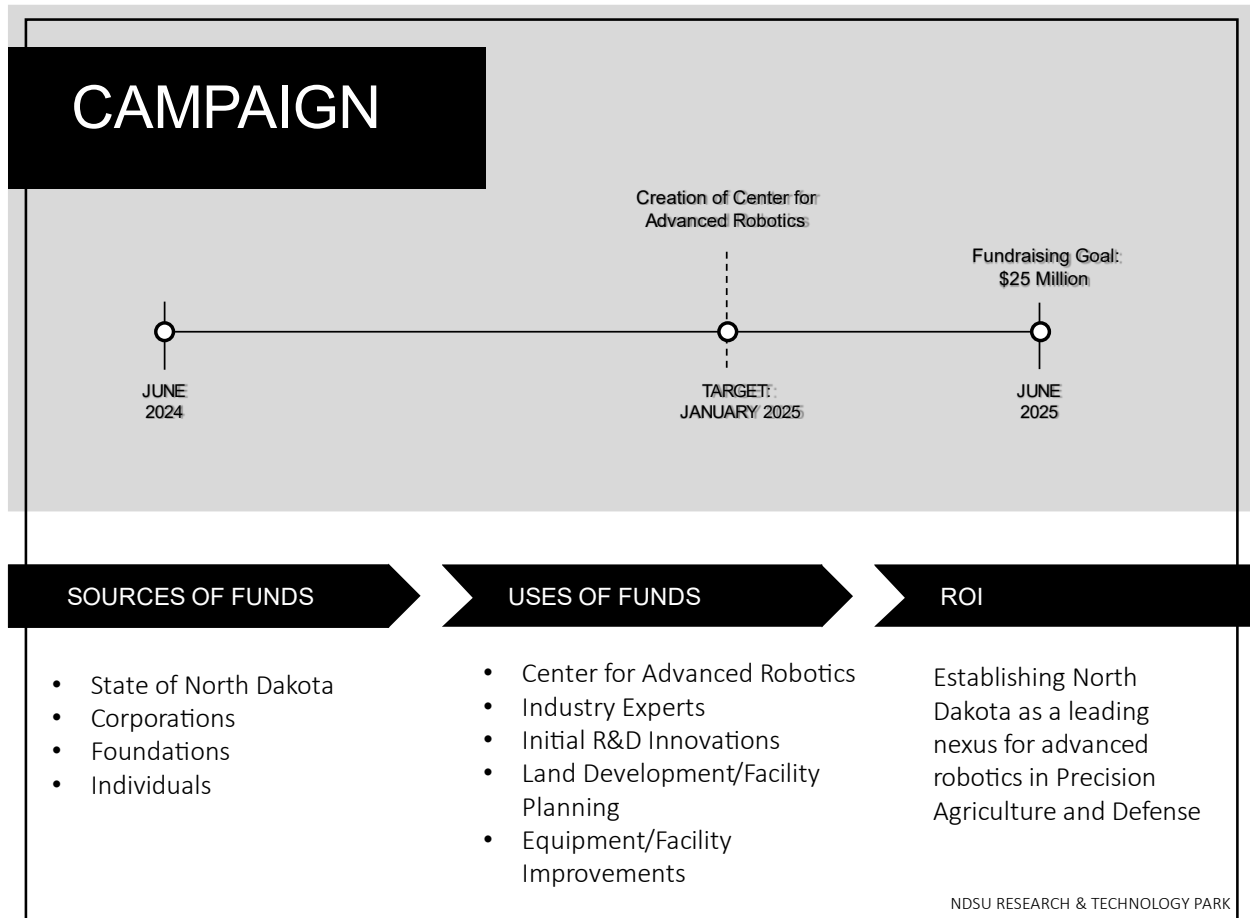
Let's bring this back to us. This is a look at the future state of the Park. Starting in the center of the screen these are the key teams we are building internally. They will connect us to the markets we serve and the key technologies we plan to focus on that you see at the top of the screen.

The result of this is going to be the impact we bring. **Advanced automation addressing jobs that continue to remain unfilled.** Technology advancements and new product development that enables the commercial market and military to improve their Return on Investment by further integrating intelligent autonomous mobile equipment into their operations.



If we peel back another layer, you can see the markets we are going to serve on the left as we engage with them to determine which problems and opportunities to focus on. Those will be pushed to our Engineering team where they'll either leverage existing IP from others or create our own. The result is going to be either a solution that is then delivered back to our customer or a product that we decide to spin out. This will create our own internal pipeline of start-ups to fill the incubator with some subset of those growing large enough to become a tenant in the Park.

We will still work with other start-ups in the region and across the State, but this model allows us to also lean into our own activities and create an internal pipeline of start-ups.



As I close, we are in the process of fundraising and intend to use those funds to establish a yet-to-be-named Center for Advanced Robotics, continue to hire industry experts to grow our team so we can begin engaging with the private sector and military, and/or begin working on our own products. We also have infrastructure needs (water and sewer, roads, signage, etc.) to develop some land in the Park. Finally, we need to make some facility improvements to accommodate the electronics equipment we need to start layering into the 8,000 sq ft Innovation Studio that we have in the Technology Incubator.

ECONOMIC EFFECTS EXPECTED IN NORTH DAKOTA

JOBS	PAYROLL	SALES	VALUE ADD
<p>Total of 900+ jobs will be created in the region</p> <ul style="list-style-type: none"> • 900+ jobs will be on-going each year • 400+ direct₂ • 400+ ripple effect jobs <p>1. 10 Year Cumulative, ND Region 2. Research Park Operations + Spinoff Startups</p>	<p>\$375M+ in new payroll/benefits in the region₁</p> <ul style="list-style-type: none"> • \$80M+ in recurring payroll/benefit • \$100K+ average direct annual salary₂ • \$70K+ average ripple effect salary 	<p>\$900M+ in sales to businesses in the region₁</p> <ul style="list-style-type: none"> • \$250M+ sales will be on-going each year • \$180M+ in direct sales₂ • \$70M+ in ripple effect sales 	<p>\$300M+ in contribution to Gross State Product₁</p> <ul style="list-style-type: none"> • \$60M+ will be ongoing each year • \$10M+ in direct₂ • \$50M+ in ripple effect



Our Return on Investment is centered around establishing North Dakota as a leading nexus for advanced robotics in precision ag and defense. Today there are **620 jobs in the Park with an average total salary of roughly \$52,402,790**. When we fast forward 10 years and turn around, we want those years to have counted.

This is a very preliminary and conservative look at the economic effect which is building on the foundation we have today. We worked with outside parties to develop an initial look at the Year 10 effect which includes additional job creation and economic impact.

We started with the question, Why? Why are we doing this? The answer – we believe we have the right industry experience and the pieces in North Dakota to excel in bringing advanced automation and robotics to industry and the military. Now is the time to do so. We believe the future impact on the State will be profound.

Thank you for your time and consideration of our request. I'm happy to answer any questions you may have.

January 30, 2025

Testimony in Support for Senate Bill 2256 – Research and Technology Park Fund

Dear Mr. Chairman and Members of the Committee,

The National Robotics Engineering Center (NREC) at Carnegie Mellon University is excited to partner with the NDSU Research and Technology Park (RTP) to create a robotics R&D center in North Dakota to replicate the success and impact NREC has had in the Pittsburgh region over the last 30 years.

We visited the RTP and surrounding community in May of 2024, and it was clear that they bring significant value to this partnership, which will translate into maximum impact for the region and also help NREC further its mission. The RTP already has many of the key elements needed for a successful robotic center, including existing facilities with labs and an innovation studio, established support for start-ups, visionary leadership with business experience, existing relationships with potential customers (defense companies, agriculture companies, etc.), access to talent from NDSU and local industry, and access to unique test sites (e.g. drone testing, ag robot testing) in North Dakota. There is also a strong entrepreneurial spirit in the region, which is essential for rapid growth of the robotic ecosystem.

In this mutually beneficial partnership, we clearly see potential for the successful creation and growth of an ecosystem centered around robotics with immense impact for the state in terms of innovation, creation of high-paying jobs, economic growth, and a thriving community.

Both economic experts and technology experts agree that robotics and AI is a rapidly growing industry that is on track to soon become ubiquitous across all sectors from agriculture, defense, construction, logistics, retail, transportation, manufacturing, chemical, medical, and more. By creating a robotics R&D center in partnership with the RTP, we aim to build a high-tech industry in North Dakota to capitalize on this robotics and AI revolution.

NREC was established in 1995 through a partnership between CMU and NASA, with support from state and local governments sharing a mission to develop advanced robotic solutions and support their commercialization. Through successful project execution and technology transfer, NREC became a catalyst for Pittsburgh's transformation into a technology hub, particularly in robotics and AI, and the center has had a measurable impact in the community by spurring neighborhood development, increasing household incomes, and job growth.

Over the years, NREC alumni have founded numerous companies, contributing to Pittsburgh's economic resurgence. Many alumni remain in the region, driving the local tech sector. Among the 120+ start-ups in the Pittsburgh region, many have ties to NREC in one way or another, fostering a robust innovation ecosystem. Furthermore, NREC supports educational initiatives to develop the future robotics workforce, including K-12 programs, teacher training, community college courses and workforce development.

We fully support this partnership and are committed to working with the RTP to assist with the creation and growth of a robotics center, foster the innovation ecosystem, and accelerate its impact for the region.

Sincerely,

Jeff Legault
Associate Director
National Robotics Engineering Center
Carnegie Mellon University

PREPARED TESTIMONY AND STATEMENT FOR THE RECORD

**Senate Bill 2256 –
Senate Workforce Development Committee
Senator Wobbema, Chair
January 31, 2025**

Senator Wobbema and members of the Workforce Development Committee, thank you for the opportunity to appear before you today. I am Brigadier General James Cluff, United States Air Force, Retired, and I am here today in support of Senate Bill SB2256.

The topic at hand is funding for the North Dakota State Research and Technology Park. Through the course of this hearing, we have and will discuss very important topics such as innovation, technology, autonomy, and Artificial Intelligence to name a few. I urge this committee to remember that the heart of what we will discuss today revolves around PEOPLE. It is people, North Dakota citizens, that will lead the research, come up with the ideas, and execute the plans that we will discuss today. Of course, the technology is important, but it is the people that will make it a reality by converting those technologies into products that the military and commercial market benefit from.

I applaud the Tech Park's board of directors' prescient decision to bring Ms. Brenda Wyland back to public service from her work in the private sector. A woman of Brenda's talent and capability can succeed in any endeavor – she can easily be the CEO of a Fortune 500 company. The fact that she is working for your state, leading the NDSU Research and Technology Park, is a bit of foreshadowing on this journey. You already have success in your grasp.

The Tech Park plan is not aspirational; it is ready to be executed. This concept is not about spending years and millions of dollars attempting to lure companies to North Dakota; it is not about linking existing businesses in the hopes they do business with each other and in the process create a few new jobs. This effort is about helping to solve some of our Nation's most pressing National Security challenges by developing technologies and capabilities that can be delivered to our Warfighters in realistic timelines.

There is a long, successful history of university research bringing amazing advances to our citizens. Institutions like Oxford University, whose research into production of a powdered form of penicillin saved thousands of lives during World War II. Jonas Salk's work at the University of Pittsburgh created the Polio Vaccine. How many lives has the University of Minnesota and James "Crash" Ryan saved through their invention – the retractable locking seat belt? For dog lovers in the room, over 30 million dogs have been saved because two researchers from Iowa State developed a Kennel Cough vaccine. The list goes on and on. Countless inventions that quite literally changed the world but would not have happened had they not been converted into a commercial product. They also brought hundreds of millions of dollars back to their states. Money that was then reinvested to continue that journey. With the investment we are asking for today, you are putting North Dakota State on the path to join some amazing organizations by doing life-changing work. The technologies, innovations, and capabilities Brenda and her team will develop and turn into tangible products with this investment have the potential to change the character of war and agriculture.

Senators, we are asking for a lot of trust today. I am asking you to trust me when I say that this effort can produce results that the Department of Defense desperately

needs. I am asking you to trust me when I say that Ms. Brenda Wyland and her team will not fail you or the people of North Dakota – she will deliver. Ms. Wyland, Mr. Josh Gelinske, and their team are asking you to trust them that this state's \$20,000,000 investment will be paid back to the State and its people many times over.

This state has lived and breathed innovation and technology in so many ways. North Dakota is the Gold Standard in the Unmanned Aerial Systems ecosystem, particularly through the decade's long efforts of Senator Hoeven. Grand Skies is a shining example of Public-Private Partnerships with the United States Air Force. As the Director of Montana State's aviation program, it pains me to say this, but University of North Dakota's Aerospace College, led by my United States Air Force Academy classmate, Dr. Bob Kraus, is the Gold Standard in the collegiate aviation training ecosystem. And that is why I am confident when I say that with your support of this funding request, and under the leadership of Ms. Brenda Wyland, the NSDU Research and Technology Park team, will be another example of North Dakota leadership and high standards.

There is so much more I want to discuss with the committee. I look forward to a fruitful and productive discussion. This concludes my formal remarks, and I am happy to answer any questions you may have.

01/30/2025



Chairman Wobbema and Esteemed Members of the Committee,

I am writing on behalf of 701 Fund, an organization dedicated to supporting the growth and success of North Dakota's entrepreneurial ecosystem, particularly in the emerging sectors of technology, innovation, and autonomous systems. We are proud to be a part of the state's ongoing efforts to foster economic diversification and technological leadership. As Managing Director of 701 Fund, ***I strongly support Senate Bill 2256 and urge you to approve this critical piece of legislation.***

The NDSU Research & Technology Park (RTP) has been a driving force in advancing the entrepreneurial ecosystem in North Dakota for over 25 years. Its mission aligns closely with 701 Fund's commitment to helping transform groundbreaking ideas into successful, scalable businesses. By supporting SB 2256, we can drive the RTP's new business model that will serve as a key catalyst for innovation—especially in the areas of autonomous systems, robotics, and artificial intelligence (AI)—that will benefit not only North Dakota but also the broader national and global markets.

North Dakota is uniquely positioned at the intersection of agriculture, energy, and defense industries, each of which is being revolutionized by autonomous technology. The RTP is essential in bringing together academia, industry leaders, and investors to accelerate the commercialization of these technologies. However, as it stands, we lack a dedicated space where these innovations can be nurtured, refined, and brought to market in partnership with private industry and the defense sector. SB 2256 will address this gap by establishing a nexus of robotics and AI engineering talent to help fast-track solutions and create new economic opportunities for our state.

The growth of the RTP is crucial not only for technological advancement but also for job creation and workforce development. By strengthening North Dakota's AI, robotics, and autonomous mobile equipment capabilities, we are equipping our workforce with the skills and knowledge necessary to thrive in the industries of tomorrow. Additionally, these efforts will directly contribute to North Dakota's growing reputation as a hub for innovation, attracting investment and talent to our state.

In conclusion, I strongly urge the committee to support SB 2256. By doing so, you will enable North Dakota to maintain its leadership in emerging technologies, drive economic growth, and ensure our state remains competitive on a national and global scale. At 701 Fund, we are excited to continue supporting this vision and look forward to seeing the RTP's continued success.

Thank you for your time and consideration. Please feel free to contact me directly if you have any questions or would like to discuss this matter further.

Sincerely,

A handwritten signature in black ink, appearing to read 'Greg Syrup'.

Greg Syrup
Managing Director
701 Fund



North Dakota Senate

STATE CAPITOL
600 EAST BOULEVARD
BISMARCK, ND 58505-0360



Senator Ronald Sorvaag

COMMITTEES:

District 45

Appropriations

3402 Birdie Street North

Division (Chair)

Fargo, ND 58102-1201

rsorvaag@ndlegis.gov

Appropriations - Education and Environment

January 31, 2025

Chairman Wobbema and Members of the Workforce Development Committee,

SB2256 deals with establishing a special fund for NDSU Research Technology Park.

This fund's purpose is to establish a workforce that would develop robotics to assist growth in precision agriculture and defense. Part of this fund would also be used to in developing a partnership with Carnegie Mellon University in advancing this project.

Needs to be pointed out that NDSU Research Technology Park is not part of the NDSU University or the Higher Education system in any way.

The details of how this will drive the Research Technology Park in a new direction for the benefit of the State of North Dakota and the Regions workforce will be explained by the presenters that follow me.

The bill puts the oversight of the fund and reporting with the Industrial Commission and includes reporting to the Legislature on the activities of the fund.

The funding in SB2256 is one time funding.

Chairman Wobbema and committee thank you for your time, I would ask for your favorable consideration on SB2256, and I would be glad to stand for any questions.

Sen. Ronald Sorvaag

ND District 45



Joint Letter of Support – SB 2256

Friday, January 31, 2025

Chairman Wobbema and members of the Senate Workforce Development Committee,

On behalf of the Fargo Moorhead West Fargo Chamber of Commerce (FMWF Chamber) and the Greater Fargo Moorhead Economic Development Corporation (GFMEDC), we respectfully offer testimony in support of House Bill 2256.

The North Dakota State University Research and Tech Park (RTP) is a vital component to North Dakota's research and innovation ecosystem – building strategic partnerships, developing critical industries, and diversifying our state's economy. With more than 50 years of combined experience as CEOs of business development organizations across six states, this is the most industry-aligned and focused initiative we've witnessed of a higher education institution developing programming and relationships through the lens of business and economic development.

The RTP has outlined a strategic plan and business model that is focused on the future, targeting emerging industries, like robotics, artificial intelligence, and autonomous systems. Under this direction, the RTP has expanded existing relationships and forged new, impactful relationships with state entities, and globally recognized organizations such as the National Robotics Engineering Center at Carnegie Mellon University. This industry-driven strategy, accompanied by meaningful relationships, synergistically aligns with regional and statewide economic development strategies that support the enhancement of critical industry sectors, such as AgTech, BioSciences, Advanced Manufacturing, Energy, Autonomous Systems.

With the state's investment, the RTP will become a vital hub for emerging technology – fostering an environment that transforms innovative ideas into commercialized products. These activities will further define North Dakota as an international leader in research and technology – attracting new companies and investments to the state. In fact, the third-party economic impact analysis conducted on behalf of this initiative provides significant justification for the investment being requested - \$300 million in additional State GDP and nearly \$1 billion of in-state business sales just in the first decade.

Moreover, the investment in the North Dakota State University Research and Tech Park represents a transformative opportunity for our state. This innovative solution creates dynamic pathways for economic growth, that will significantly bolster key industries and develop the next generation of talent. We urge this committee to support the Senate Bill 2256 and give it a DO PASS recommendation, ensuring North Dakota capitalizes on this unique opportunity to position the state as a leader in emerging technology.

Thank you for your attention to this matter and your commitment to North Dakota.

Sincerely,

Shannon Full
President and CEO
FMWF Chamber

Joe Raso
President and CEO
GFMEDC

2025 SENATE STANDING COMMITTEE MINUTES

Workforce Development Committee Fort Lincoln Room, State Capitol

SB 2256
2/6/2025

Relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

2:16 p.m. Chairman Wobbema opened the hearing.

Members Present: Chairman Wobbema, Vice-Chairman Axtman, Senator Boschee, Senator Larson, Senator Powers.

Discussion Topics:

- Future job opportunities

2:21 p.m. Senator Axtman moved Do Pass and Rereferred to Appropriations.

2:21 p.m. Senator Boschee seconded the motion.

Senators	Vote
Senator Mike Wobbema	Y
Senator Michelle Axtman	Y
Senator Josh Boschee	Y
Senator Diane Larson	Y
Senator Michelle Powers	Y

Motion passed 5-0-0.

Senator Axtman will carry the bill

2:22 p.m. Chairman Wobbema closed the hearing.

Andrew Ficek, Committee Clerk

REPORT OF STANDING COMMITTEE
SB 2256 ([25.0792.02000](#))

Workforce Development Committee (Sen. Wobbema, Chairman) recommends **DO PASS** and **BE REREFERRED** to the **Appropriations Committee** (5 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2256 was rereferred to the **Appropriations Committee**. This bill affects workforce development.

2025 SENATE APPROPRIATIONS

SB 2256

2025 SENATE STANDING COMMITTEE MINUTES

Appropriations - Education and Environment Division Sakakawea Room, State Capitol

SB 2256
2/12/2025

A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota Century Code, relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

3:04 p.m. Chairman Sorvaag called the meeting to order.

Members Present: Chairman Ronald Sorvaag, Senator Cole Conley, Senator Scott Meyer, Senator Donald Schaible, Senator Paul J. Thomas.

Discussion Topics:

- Automatization of Intelligent Autonomous mobile Equipment.
- Research and Technology Park Business Model.
- Impact to the State of ND.

3:05 p.m. Chairman Sorvaag introduced the bill and submitted testimony #37448.

3:06 p.m. Brenda Wyland, CEO, NDSU Research and Technology Park, testified in favor and submitted testimony #37450.

3:45 p.m. Chairman Sorvaag closed the meeting.

Steven Hall, Committee Clerk



North Dakota Senate

STATE CAPITOL
600 EAST BOULEVARD
BISMARCK, ND 58505-0360



Senator Ronald Sorvaag

COMMITTEES:

District 45
Appropriations
3402 Birdie Street North
Division (Chair)
Fargo, ND 58102-1201
rsorvaag@ndlegis.gov

Appropriations - Education and Environment

January 31, 2025

Members of the Senate Appropriations Education and Environment Division,

SB2256 deals with establishing a special fund for NDSU Research Technology Park.

This fund's purpose is to establish a workforce that would develop robotics to assist growth in precision agriculture and defense. Part of this fund would also be used to in developing a partnership with Carnegie Mellon University in advancing this project.

Needs to be pointed out that NDSU Research Technology Park is not part of the NDSU University or the Higher Education system in any way.

The details of how this will drive the Research Technology Park in a new direction for the benefit of the State of North Dakota and the Regions workforce will be explained by the presenters that follow me.

The bill puts the oversight of the fund and reporting with the Industrial Commission and includes reporting to the Legislature on the activities of the fund.

The funding in SB2256 is one time funding.

Committee members thank you for your time, I would ask for your favorable consideration on SB2256, and I would be glad to stand for any questions.

Sen. Ronald Sorvaag

ND District 45

NDSU

RESEARCH AND TECHNOLOGY PARK



Mr. Chairman and members of the committee, I'm Brenda Wyland and I serve as the CEO of the NDSU Research and Technology Park in Fargo located on NDSU's campus. I'm here today testifying in strong support of SB2256. This bill requests \$20 Million to support the new vision and path forward we are going to share with you today.

This is my return to the Research Park. I was with the Park from 2008-2013. Prior to my return to the Park, I spent the last 10 years in the private sector working for a fast-growth technology company primarily focusing on starting and leading our government and defense division before jumping back over to the precision ag side of the business.

A little over a year ago, I was recruited back to the Park to create a bold new vision and business model.

We intentionally started with a few goals in mind. We didn't want to duplicate key assets in the State like Grand Farm, Grand Sky, or the Northern Plains UAS Test Site. Instead, we wanted to find a way to leverage them and contribute to their success in a meaningful way.



PROBLEM STATEMENT

North Dakota State University (NDSU) is a leading educational and research institution but is not positioned to convert research discoveries into commercial products that support the rapidly evolving needs of industry.

OPPORTUNITY

Emphasize the productization of *intelligent autonomous mobile equipment*.

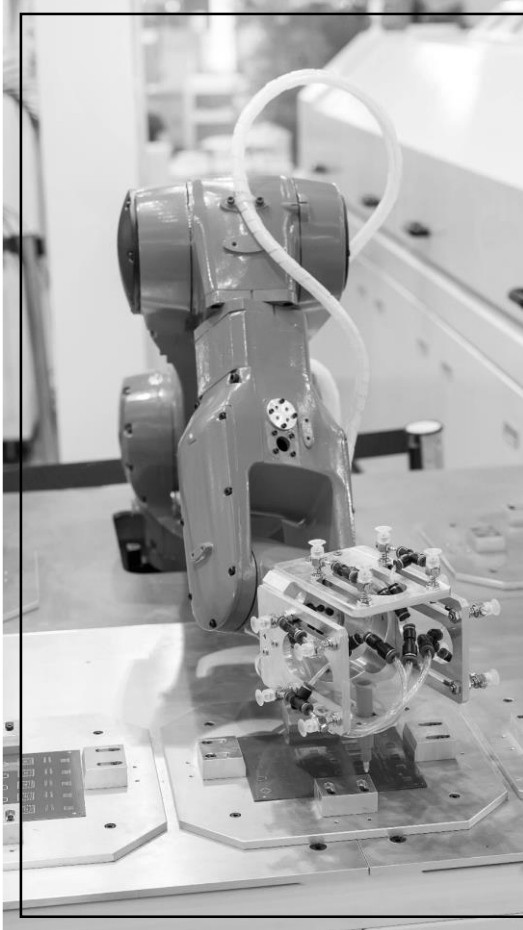
Connect world class engineers and researchers in six specific technology areas to the needs of industry.

Bridge the needs of the global marketplace with the convergence of technologies to solutions.

NDSU RESEARCH & TECHNOLOGY PARK

We also spent time looking at the role of the University and that of the Park. NDSU is a leading educational and research institution, but, like many other Universities, it is not positioned to convert those discoveries into commercial products. However, if we were to optimize that capability, think of the significant impact we could have on the economy.

As a result, the Park created an agile and focused business model that's going to focus on intelligent autonomous mobile equipment. We'll talk more about this in a minute. Further, we are connecting engineers to six specific technology areas directly related to the needs of industry. Thus, enabling us to bridge the gap between discovery and societal benefit.



BUSINESS MODEL

We create solutions that solve global problems then transition those products into the market.

Revenue generated by our engineering projects and product solutions is reinvested to ensure our mission thrives.

Our model will serve as a catalyst to drive growth for the State of North Dakota

NDSU RESEARCH & TECHNOLOGY PARK

The next thing we focused on was creating a new business model, one that was going to allow us to become profitable and continue to reinvest those profits into funding our core operations in future years. ***This model will create multiple revenue streams by engaging in contracts directly with the commercial market and military to design, engineer, and test advance automation and robotics prototypes.*** As we move through my testimony, you'll hear about future plans to move beyond prototyping along with how we are going to build the expertise to do so.

SUCCESSFUL BUSINESS MODELS



- ✓ Rapid proof-of-concept and in-depth development and testing
- ✓ \$800 million in Sales
- ✓ 27 years of making robotics a reality
- ✓ 850+ individual inventions
- ✓ 120 start-ups



- ✓ Rapid proof-of-concept, prototyping and commercialization
- ✓ 80 years of innovations
- ✓ 13,000 patents filed (100+ active licenses)
- ✓ 50+ spin-off companies/30+ start-ups in portfolio



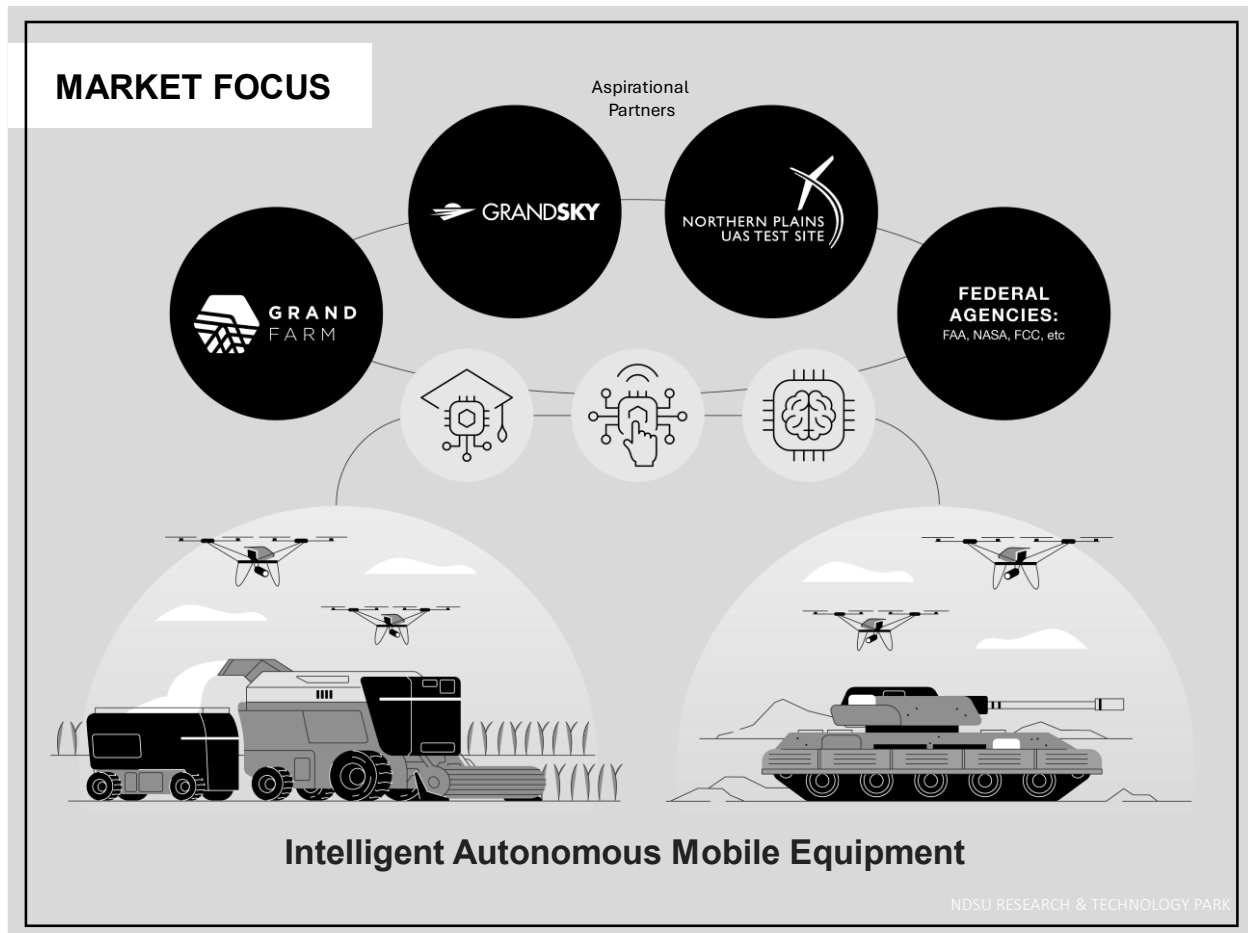
- ✓ \$40 million hypersonic and applied research facility
- ✓ Single location for industry partners to work on materials and manufacturing innovations and test capabilities
- ✓ Vertically integrated prototyping center to design and manufacture
- ✓ Opened June 6, 2023

NDSU RESEARCH & TECHNOLOGY PARK

As this business model started to take shape, we began looking into whether others were doing similar activities. It turns out that yes, a few are. For example, Carnegie Mellon's National Robotics Engineering Center (often referred to as NREC) has core functions like what we are going to start doing. As you can see on this slide, they conduct rapid proof-of-concept and in-depth development and testing. They have been highly successful with their model generating \$800 Million in Revenue over the years.

SRI stands for the [Stanford Research Institute](#). They also conduct similar activities but do go beyond into other means of commercialization activities. Both NREC and SRI have had significant start-ups created and spun out because of their model.

Finally, Purdue University. Last summer they opened a manufacturing innovation and test center. They are a vertically integrated prototyping center that will go beyond that stage and into manufacturing.

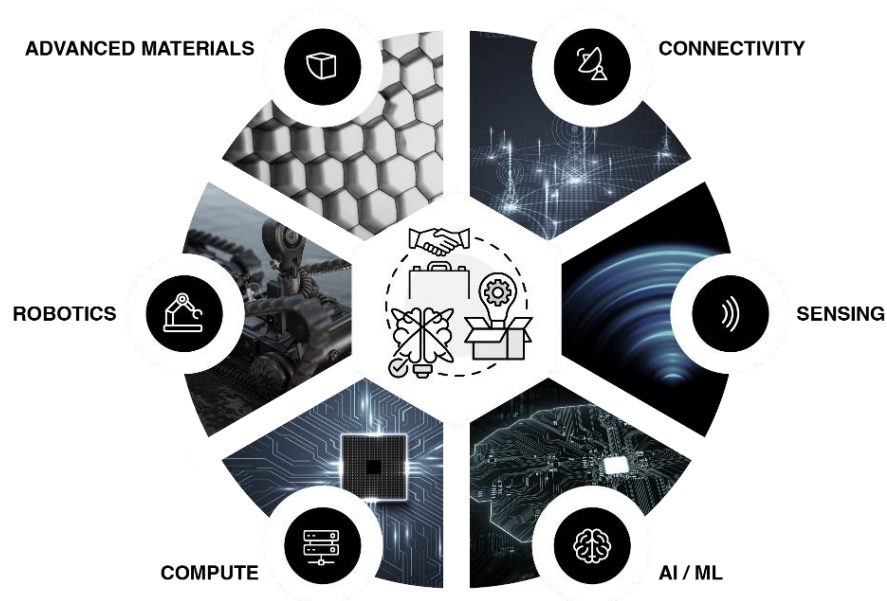


While our vision and business model were starting to take shape, we turned our attention to market focus. We can't be everything to everyone, so we are focusing on the precision ag and defense markets. The technical problems that exist in making a ground and air system work seamlessly are the same in precision ag and defense. You wouldn't necessarily know that unless you spent time working in both industries like me and my Chief Technology Officer have.

An underlying enabler is also the Energy market. To do the types of activities we are going to talk more about we need power – computational power – which means we need Energy Innovation. ***We want to compliment the work the EERC is doing by focusing on robotics and AI to advance that industry while they continue the great work they are doing in energy and geology.***

Also, as you can see, we want to leverage the environmental test capabilities that exist in the State. We have no intentions of duplicating those efforts but instead leveraging them.

CONVERGENCE OF TECHNOLOGIES TO SOLUTIONS



NDSU RESEARCH & TECHNOLOGY PARK

To develop intelligent autonomous mobile equipment, we needed to identify the key technologies that we were going to build a team and industry expertise around. As you can see by this slide, when you peel back the technical layers of what goes into developing autonomous equipment, key technologies rise to the top. They need to be connected to networks to enable them to work in all kinds of different environments. They need to be able to sense and think. We need to leverage AI as a tool to give them utility or purpose so they can perform specific tasks and so forth.

Recently, I hired Josh Gelinske to serve as the Park's Chief Technology Officer. He brings significant technical expertise in several of these areas like connectivity, sensing, and artificial intelligence. He's now tasked with developing a high-caliber, high-performing team of engineers and industry experts to begin working on contracts and/or our own products. You'll hear more about our model in just a minute.



CARNEGIE MELLON UNIVERSITY NATIONAL ROBOTICS ENGINEERING CENTER



- World leader in engineering robotics solutions for agriculture, defense, mining, automotive, and energy.
- Develop and mature robotic technologies from concept to commercialization.
- Rapid proof-of-concept demonstration followed by in-depth development and testing.

\$800

Million in Sales

27Years of Making
Robotics a
Reality**350+**Projects
Successfully
Delivered**850+**Individual
Inventions**160+**Robotics
Experts

✓ Targeted robotics partner

✓ Access to technical expertise in world-leading robotics

✓ Highly respected reputation

✓ Acceleration of Park's vision and strategy

✓ Intellectual property policies and procedures already
accepted by the private sector and military

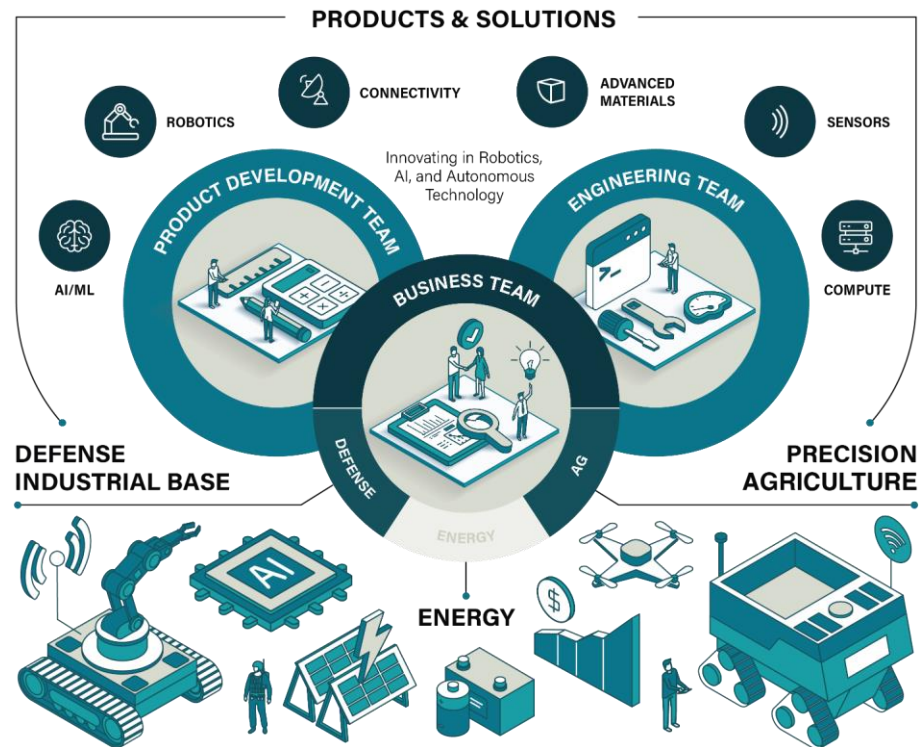
NDSU RESEARCH & TECHNOLOGY PARK

Back in February of last year, we reached out to Carnegie Mellons' National Robotics Engineering Center as we wanted to visit and learn more. As time progressed, we discovered they were looking for a strategic partner. They also see what we see and want further diversification in precision ag and defense.

We have since entered into a Letter of Intent with NREC and are in the process of working through a collaborative agreement with them. Mr. Jeff Legault, Associate Director, NREC will follow with testimony and explain NREC's support of this project.

Win-Win Partnerships. NREC brings significant technical expertise to the table in niche areas. They are a highly respected global leader in robotics, having deployed robotics on every continent around the world. In addition, you don't generate the level of Revenue that they have without having figured out the IP strategy to engage with the commercial market and military. All of this will enable us to accelerate our vision. In turn, NREC has access to complimentary technical skills in areas they have an interest in, a strategic partner to collaborate with on federal programs, and a fast-track to further market opportunities.

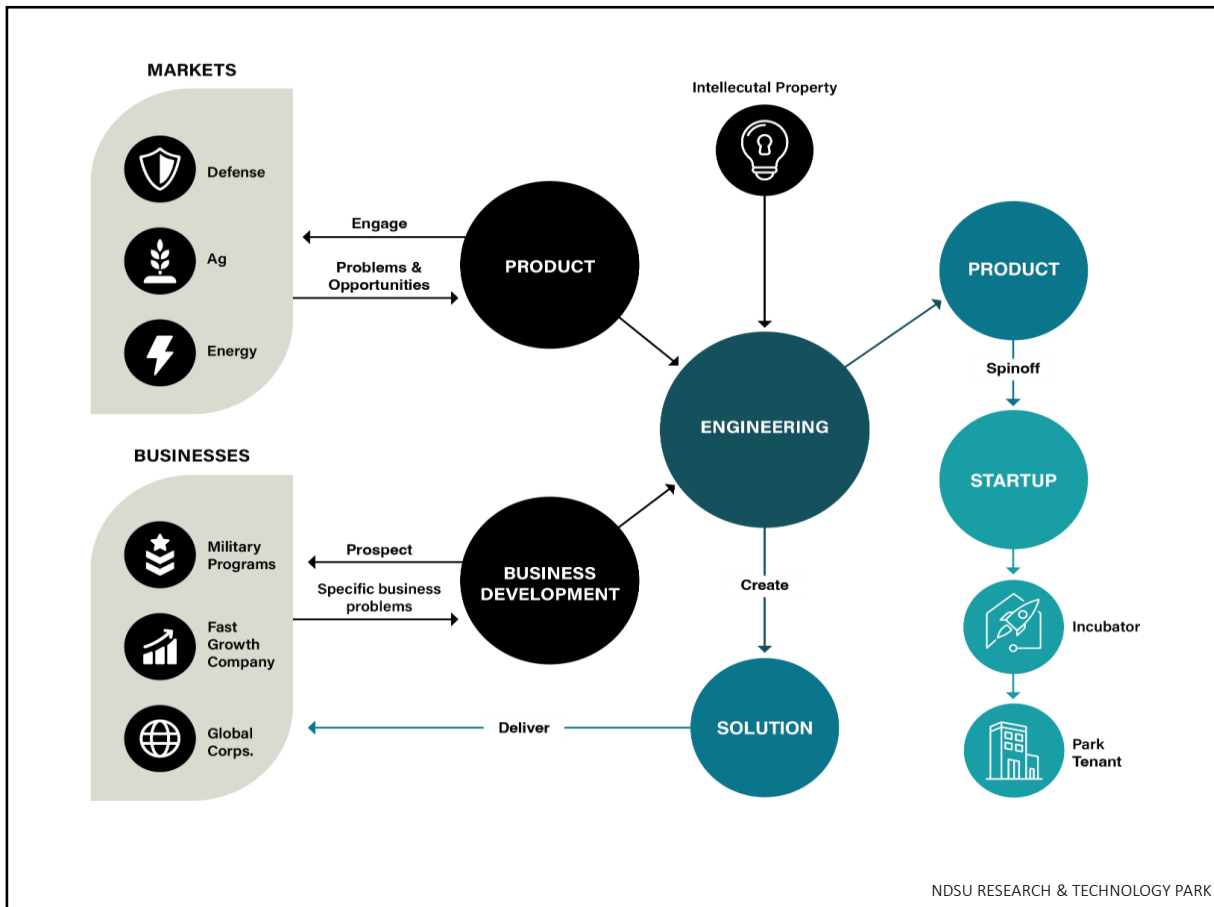
OUR ECOSYSTEM



NDSU RESEARCH & TECHNOLOGY PARK

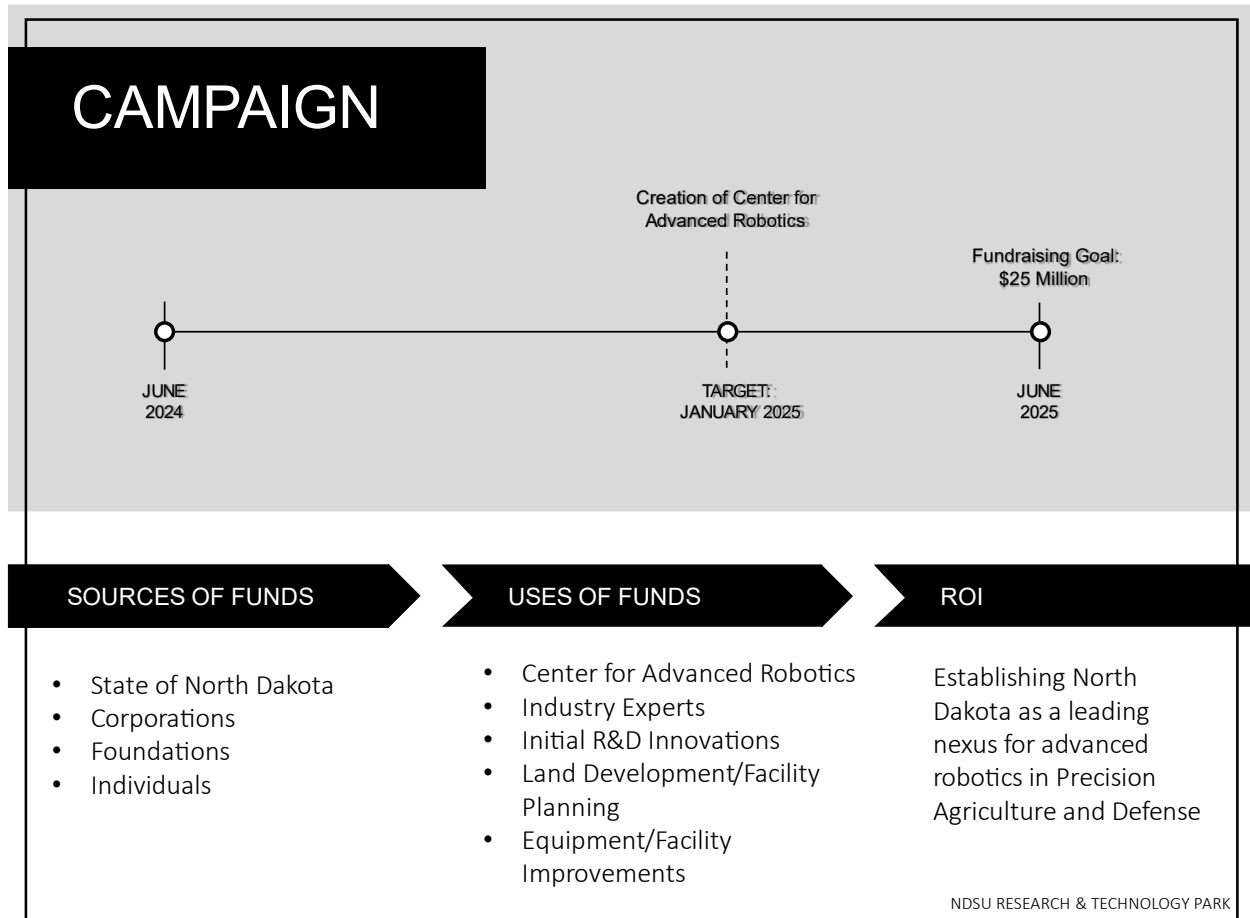
Let's bring this back to us. This is a look at the future state of the Park. Starting in the center of the screen these are the key teams we are building internally. They will connect us to the markets we serve and the key technologies we plan to focus on that you see at the top of the screen.

The result of this is going to be the impact we bring. **Advanced automation addressing jobs that continue to remain unfilled.** Technology advancements and new product development that enables the commercial market and military to improve their Return on Investment by further integrating intelligent autonomous mobile equipment into their operations.



If we peel back another layer, you can see the markets we are going to serve on the left as we engage with them to determine which problems and opportunities to focus on. Those will be pushed to our Engineering team where they'll either leverage existing IP from others or create our own. The result is going to be either a solution that is then delivered back to our customer or a product that we decide to spin out. This will create our own internal pipeline of start-ups to fill the incubator with some subset of those growing large enough to become a tenant in the Park.

We will still work with other start-ups in the region and across the State, but this model allows us to also lean into our own activities and create an internal pipeline of start-ups.



As I close, we are in the process of fundraising and intend to use those funds to establish a yet-to-be-named Center for Advanced Robotics, continue to hire industry experts to grow our team so we can begin engaging with the private sector and military, and/or begin working on our own products. We also have infrastructure needs (water and sewer, roads, signage, etc.) to develop some land in the Park. Finally, we need to make some facility improvements to accommodate the electronics equipment we need to start layering into the 8,000 sq ft Innovation Studio that we have in the Technology Incubator.

ECONOMIC EFFECTS EXPECTED IN NORTH DAKOTA

JOBS	PAYROLL	SALES	VALUE ADD
<p>Total of 900+ jobs will be created in the region</p> <ul style="list-style-type: none"> • 900+ jobs will be on-going each year • 400+ direct₂ • 400+ ripple effect jobs 	<p>\$375M+ in new payroll/benefits in the region₁</p> <ul style="list-style-type: none"> • \$80M+ in recurring payroll/benefit • \$100K+ average direct annual salary₂ • \$70K+ average ripple effect salary 	<p>\$900M+ in sales to businesses in the region₁</p> <ul style="list-style-type: none"> • \$250M+ sales will be on-going each year • \$180M+ in direct sales₂ • \$70M+ in ripple effect sales 	<p>\$300M+ in contribution to Gross State Product₁</p> <ul style="list-style-type: none"> • \$60M+ will be ongoing each year • \$10M+ in direct₂ • \$50M+ in ripple effect
<p>1. 10 Year Cumulative, ND Region 2. Research Park Operations + Spinoff Startups</p>			



Our Return on Investment is centered around establishing North Dakota as a leading nexus for advanced robotics in precision ag and defense. Today there are **620 jobs in the Park with an average total salary of roughly \$52,402,790**. When we fast forward 10 years and turn around, we want those years to have counted.

This is a very preliminary and conservative look at the economic effect which is building on the foundation we have today. We worked with outside parties to develop an initial look at the Year 10 effect which includes additional job creation and economic impact.

We started with the question, Why? Why are we doing this? The answer – we believe we have the right industry experience and the pieces in North Dakota to excel in bringing advanced automation and robotics to industry and the military. Now is the time to do so. We believe the future impact on the State will be profound.

Thank you for your time and consideration of our request. I'm happy to answer any questions you may have.

2025 SENATE STANDING COMMITTEE MINUTES

Appropriations - Education and Environment Division Sakakawea Room, State Capitol

SB 2256
2/14/2025

A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota Century Code, relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

11:20 p.m. Chairman Sorvaag called the meeting to order.

Members Present: Chairman Ronald Sorvaag, Senator Cole Conley, Senator Scott Meyer, Senator Donald Schaible, Senator Paul J. Thomas.

Discussion Topics:

- Revenue Generating Aspect of the Bill.

11:21 a.m. Senator Schaible moved to adopt amendment LC #25.0792.02001 and submitted testimony in favor #37898.

11:21 a.m. Senator Meyer Seconded the motion.

Senators	Vote
Senator Ronald Sorvaag	Y
Senator Cole Conley	Y
Senator Scott Meyer	Y
Senator Donald Schaible	Y
Senator Paul J. Thomas	Y

Motion Passed: 5-0-0.

11:23 a.m. Thomas moved Do Pass as amended.

11:23 a.m. Senator Schaible Seconded.

Senators	Vote
Senator Ronald Sorvaag	Y
Senator Cole Conley	Y
Senator Scott Meyer	Y
Senator Donald Schaible	Y
Senator Paul J. Thomas	Y

Motion Passed: 5-0-0.

11:24 a.m. Senator Thomas will carry the bill.

11:27 a.m. Chairman Sorvaag adjourned the meeting.

Steven Hall, Committee Clerk

25.0792.02001
Title.

Prepared by the Legislative Council
staff for Senate Appropriations -
Education and Environment Division
Committee

February 14, 2025

Sixty-ninth
Legislative Assembly
of North Dakota

PROPOSED AMENDMENTS TO

SENATE BILL NO. 2256

Introduced by

Senators Sorvaag, Patten, Sickler, Davison

Representatives Nathe, Swiontek

- 1 A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota
2 Century Code, relating to a research technology park fund; to provide a continuing
3 appropriation; to provide a transfer; and to provide a report.

4 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

- 5 **SECTION 1.** A new section to chapter 54-17 of the North Dakota Century Code is created
6 and enacted as follows:

7 **Research technology park fund - North Dakota state university - Continuing**
8 **appropriation - Report.**

- 9 1. The research technology park fund is a special fund in the state treasury. All moneys
10 deposited in the fund and interest upon moneys in the fund are appropriated on a
11 continuing basis to the industrial commission for distribution to the research
12 technology park at North Dakota state university. The research technology park shall
13 use the funds in accordance with this section.
14 2. The research technology park at North Dakota state university is created to conduct
15 exploratory, transformational, and innovative research and product development
16 activities that advance intelligent autonomous mobile equipment opportunities and
17 benefit the state's economy and environment through:

- 1 a. Exploratory research and development of technologies and methodologies that
2 facilitate the prudent development and efficient use of the state's autonomous
3 agriculture resources and defense capabilities;
- 4 b. Access to advanced robotics and artificial intelligence expertise for timely
5 scientific and engineering activities to support the state's interests; and
- 6 c. Education and outreach related to the state's advanced technology resources,
7 including the advancement of engineering and technical readiness.
- 8 3. Each biennium, the research technology park shall develop a plan for the use of funds
9 received under this section, including industry matching requirements. The plan must
10 be approved by the industrial commission.
- 11 4. The research technology park may:
 - 12 a. Select research topics and projects;
 - 13 b. Enter into contracts or agreements with other institutions of higher education to
14 support the selected research topics and projects;
 - 15 c. Enter into contracts or agreements with federal, private, and nonprofit
16 organizations to carry out the selected research topics and projects; and
 - 17 d. Accept donations, grants, contributions, and gifts from any source to finance the
18 selected research topics and projects.
- 19 5. Annually, the research technology park shall report all research activities, product
20 development, and accomplishments to the industrial commission and the legislative
21 management. Upon request, the research technology park shall report to the
22 appropriations committees of the legislative assembly on the use of funding under this
23 section.

24 **SECTION 2. TRANSFER - STRATEGIC INVESTMENT AND IMPROVEMENTS FUND TO**
25 **RESEARCH TECHNOLOGY PARK FUND.** The office of management and budget shall transfer
26 the sum of ~~\$20,000,000~~ \$15,000,000 from the strategic investment and improvements fund to
27 the research technology park fund, during the biennium beginning July 1, 2025, and ending
28 June 30, 2027.

2025 SENATE STANDING COMMITTEE MINUTES

Appropriations Committee Harvest Room, State Capitol

SB 2256
2/17/2025

A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota Century Code, relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

3:08 p.m. Chairman Bekkedahl opened the hearing.

Members Present: Chairman Bekkedahl, Vice-Chairman Erbele, and Senators Burckhard, Cleary, Conley, Davison, Dever, Dwyer, Magrum, Mathern, Meyer, Schaible, Sorvaag, Thomas, Wanzek.

Members Absent: Senator Sickler.

Discussion Topics:

- Expanding Mission of the Research Tech Park
- Partners of the Research Tech Park
- Generated Revenues and Business Model of the Research Tech Park
- Economic Development

3:08 p.m. Senator Thomas introduced the bill.

3:11 p.m. Senator Thomas moved amendment LC 25.0792.02001, testimony #37909.

3:11 p.m. Senator Sorvaag seconded the motion.

Senators	Vote
Senator Brad Bekkedahl	Y
Senator Robert Erbele	Y
Senator Randy A. Burckhard	Y
Senator Sean Cleary	Y
Senator Cole Conley	Y
Senator Kyle Davison	Y
Senator Dick Dever	Y
Senator Michael Dwyer	Y
Senator Jeffery J. Magrum	Y
Senator Tim Mathern	Y
Senator Scott Meyer	Y
Senator Donald Schaible	Y
Senator Jonathan Sickler	A
Senator Ronald Sorvaag	Y
Senator Paul J. Thomas	Y
Senator Terry M. Wanzek	Y

Motion Passed 15-0-1.

3:14 p.m. Senator Thomas moved a Do Pass as Amended.

3:14 p.m. Senator Sorvaag seconded the motion.

Senators	Vote
Senator Brad Bekkedahl	Y
Senator Robert Erbele	Y
Senator Randy A. Burckhard	Y
Senator Sean Cleary	N
Senator Cole Conley	Y
Senator Kyle Davison	Y
Senator Dick Dever	Y
Senator Michael Dwyer	Y
Senator Jeffery J. Magrum	N
Senator Tim Mathern	Y
Senator Scott Meyer	Y
Senator Donald Schaible	Y
Senator Jonathan Sickler	A
Senator Ronald Sorvaag	Y
Senator Paul J. Thomas	Y
Senator Terry M. Wanzek	Y

Motion Passed 13-2-1.

Senator Thomas will carry the bill.

3:20 p.m. Chairman Bekkedahl closed the hearing.

Elizabeth Reiten, Committee Clerk

February 14, 2025

Sixty-ninth
Legislative Assembly
of North Dakota

PROPOSED AMENDMENTS TO

SENATE BILL NO. 2256

Introduced by

Senators Sorvaag, Patten, Sickler, Davison

Representatives Nathe, Swiontek

2-17-25

JB 1 of 2

1 A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota
2 Century Code, relating to a research technology park fund; to provide a continuing
3 appropriation; to provide a transfer; and to provide a report.

4 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

5 **SECTION 1.** A new section to chapter 54-17 of the North Dakota Century Code is created
6 and enacted as follows:

7 **Research technology park fund - North Dakota state university - Continuing**
8 **appropriation - Report.**

- 9 1. The research technology park fund is a special fund in the state treasury. All moneys
10 deposited in the fund and interest upon moneys in the fund are appropriated on a
11 continuing basis to the industrial commission for distribution to the research
12 technology park at North Dakota state university. The research technology park shall
13 use the funds in accordance with this section.
- 14 2. The research technology park at North Dakota state university is created to conduct
15 exploratory, transformational, and innovative research and product development
16 activities that advance intelligent autonomous mobile equipment opportunities and
17 benefit the state's economy and environment through:

JB 2022

- 1 a. Exploratory research and development of technologies and methodologies that
2 facilitate the prudent development and efficient use of the state's autonomous
3 agriculture resources and defense capabilities;
- 4 b. Access to advanced robotics and artificial intelligence expertise for timely
5 scientific and engineering activities to support the state's interests; and
- 6 c. Education and outreach related to the state's advanced technology resources,
7 including the advancement of engineering and technical readiness.
- 8 3. Each biennium, the research technology park shall develop a plan for the use of funds
9 received under this section, including industry matching requirements. The plan must
10 be approved by the industrial commission.
- 11 4. The research technology park may:
 - 12 a. Select research topics and projects;
 - 13 b. Enter into contracts or agreements with other institutions of higher education to
14 support the selected research topics and projects;
 - 15 c. Enter into contracts or agreements with federal, private, and nonprofit
16 organizations to carry out the selected research topics and projects; and
 - 17 d. Accept donations, grants, contributions, and gifts from any source to finance the
18 selected research topics and projects.
- 19 5. Annually, the research technology park shall report all research activities, product
20 development, and accomplishments to the industrial commission and the legislative
21 management. Upon request, the research technology park shall report to the
22 appropriations committees of the legislative assembly on the use of funding under this
23 section.

24 **SECTION 2. TRANSFER - STRATEGIC INVESTMENT AND IMPROVEMENTS FUND TO**
25 **RESEARCH TECHNOLOGY PARK FUND.** The office of management and budget shall transfer
26 the sum of ~~\$20,000,000~~ \$15,000,000 from the strategic investment and improvements fund to
27 the research technology park fund, during the biennium beginning July 1, 2025, and ending
28 June 30, 2027.

**REPORT OF STANDING COMMITTEE
SB 2256**

Appropriations Committee (Sen. Bekkedahl, Chairman) recommends **AMENDMENTS** ([25.0792.02001](#)) and when so amended, recommends **DO PASS** (13 YEAS, 2 NAYS, 1 ABSENT OR EXCUSED AND NOT VOTING). SB 2256 was placed on the Sixth order on the calendar. This bill affects workforce development.

2-17-25
25.0792.02001
Title.

Prepared by the Legislative Council
staff for Senate Appropriations -
Education and Environment Division
Committee

February 14, 2025

Sixty-ninth
Legislative Assembly
of North Dakota

PROPOSED AMENDMENTS TO

SENATE BILL NO. 2256

Introduced by

Senators Sorvaag, Patten, Sickler, Davison

Representatives Nathe, Swiontek

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2025 HOUSE GOVERNMENT AND VETERANS AFFAIRS

SB 2256

2025 HOUSE STANDING COMMITTEE MINUTES

Government and Veterans Affairs Committee Pioneer Room, State Capitol

SB 2256
3/14/2025

Relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

9:00 a.m. Chairman Schauer opened the hearing.

Members present: Chairman Schauer, Vice Chairman Satrom, Representatives Bahl, C. Brown, TJ Brown, Grindberg, Karls, McLeod, Rohr, Schneider, Steiner, VanWinkle, Wolff
Members absent: Representative Vetter

Discussion Topics:

- Defense and precision agriculture

9:01 a.m. Senator Sorvaag, District 45, introduced the bill and submitted testimony, #41502.

9:08 a.m. Brenda Wyland, CEO of NDSU Research and Technology Park, testified in favor and submitted testimony, #41508.

9:38 a.m. Brigadier General James Cluff, testified in favor.

9:41 a.m. Jean Francois Legault, Associate Director of National Robotics Engineering of the Carnegie Mellon University, testified in favor.

9:49 a.m. Cale Dunwoody, FMWF Chamber of Commerce, testified in favor and submitted testimony, #41470.

9:50 a.m. Jordan Kannianen, Deputy Executive Director of the North Dakota Industrial Commission, testified in favor.

9:56 a.m. Chairman Schauer closed the hearing.

Jackson Toman, Committee Clerk



Joint Letter of Support – SB 2256

Friday, March 14, 2025

Chairman Schauer and members of the House Government and Veteran Affairs Committee,

On behalf of the Fargo Moorhead West Fargo Chamber of Commerce (FMWF Chamber) and the Greater Fargo Moorhead Economic Development Corporation (GFMEDC), we respectfully offer testimony in support of Senate Bill 2256.

The North Dakota State University Research and Tech Park (RTP) is a vital component to North Dakota's research and innovation ecosystem – building strategic partnerships, developing critical industries, and diversifying our state's economy. With more than 50 years of combined experience as CEOs of business development organizations across six states, this is the most industry-aligned and focused initiative we've witnessed of a higher education institution developing programming and relationships through the lens of business and economic development.

The RTP has outlined a strategic plan and business model that is focused on the future, targeting emerging industries, like robotics, artificial intelligence, and autonomous systems. Under this direction, the RTP has expanded existing relationships and forged new, impactful relationships with state entities, and globally recognized organizations such as the National Robotics Engineering Center at Carnegie Mellon University. This industry-driven strategy, accompanied by meaningful relationships, synergistically aligns with regional and statewide economic development strategies that support the enhancement of critical industry sectors, such as AgTech, Biosciences, Advanced Manufacturing, Energy, and Autonomous Systems.

With the state's investment, the RTP will become a vital hub for emerging technology – fostering an environment that transforms innovative ideas into commercialized products. These activities will further define North Dakota as an international leader in research and technology – attracting new companies and investments to the state. In fact, the third-party economic impact analysis conducted on behalf of this initiative provides significant justification for the investment being requested - \$300 million in additional State GDP and nearly \$1 billion of in-state business sales just in the first decade.

Moreover, the investment in the North Dakota State University Research and Tech Park represents a transformative opportunity for our state. This innovative solution creates dynamic pathways for economic growth, that will significantly bolster key industries and develop the next generation of talent. We urge this committee to support the Senate Bill 2256 and give it a DO PASS recommendation, ensuring North Dakota capitalizes on this unique opportunity to position the state as a leader in emerging technology.

Thank you for your attention to this matter and your commitment to North Dakota.

Sincerely,

Shannon Full
President and CEO
FMWF Chamber

Joe Raso
President and CEO
GFMEDC



North Dakota Senate

STATE CAPITOL
600 EAST BOULEVARD
BISMARCK, ND 58505-0360



Senator Ronald Sorvaag

COMMITTEES:

District 45
Appropriations
3402 Birdie Street North
Division (Chair)
Fargo, ND 58102-1201
rsorvaag@ndlegis.gov

Appropriations - Education and Environment

March 10, 2025

Chairman Schauer and members of the House Government and Veterans Affairs Committee,

SB2256 deals with establishing a special fund for NDSU Research Technology Park.

This fund's purpose is to establish a workforce that would develop robotics to assist growth in precision agriculture and defense. Part of this fund would also be used to in developing a partnership with Carnegie Mellon University in advancing this project.

Needs to be pointed out that NDSU Research Technology Park is not part of the NDSU University or the Higher Education system in any way.

The details of how this will drive the Research Technology Park in a new direction for the benefit of the State of North Dakota and the Regions workforce will be explained by the presenters that follow me.

The bill puts the oversight of the fund and reporting with the Industrial Commission and includes reporting to the Legislature on the activities of the fund.

The funding in SB2256 is one time funding.

Chairman Schauer and committee members thank you for your time, I would ask for your favorable consideration on SB2256, and I would be glad to stand for any questions.

A handwritten signature in blue ink, appearing to read "Ronald Sorvaag".

Sen. Ronald Sorvaag

ND District 45

NDSU

RESEARCH AND TECHNOLOGY PARK



Mr. Chairman and members of the committee, I'm Brenda Wyland and I serve as the CEO of the NDSU Research and Technology Park in Fargo located on NDSU's campus. I'm here today testifying in strong support of SB2256. This bill requests \$20 Million to support the new vision and path forward we are going to share with you today.

This is my return to the Research Park. I was with the Park from 2008-2013. Prior to my return to the Park, I spent the last 10 years in the private sector working for a fast-growth technology company primarily focusing on starting and leading our government and defense division before jumping back over to the precision ag side of the business.

A little over a year ago, I was recruited back to the Park to create a bold new vision and business model.

We intentionally started with a few goals in mind. We didn't want to duplicate key assets in the State like Grand Farm, Grand Sky, or the Northern Plains UAS Test Site. Instead, we wanted to find a way to leverage them and contribute to their success in a meaningful way.



PROBLEM STATEMENT

North Dakota State University (NDSU) is a leading educational and research institution but is not positioned to convert research discoveries into commercial products that support the rapidly evolving needs of industry.

OPPORTUNITY

Emphasize the productization of *intelligent autonomous mobile equipment*.

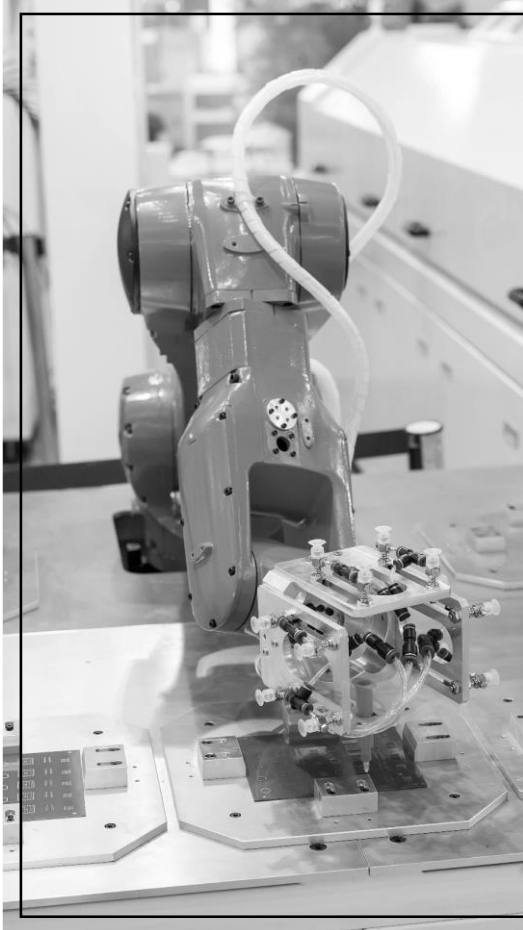
Connect world class engineers and researchers in six specific technology areas to the needs of industry.

Bridge the needs of the global marketplace with the convergence of technologies to solutions.

NDSU RESEARCH & TECHNOLOGY PARK

We also spent time looking at the role of the University and that of the Park. NDSU is a leading educational and research institution, but, like many other Universities, it is not positioned to convert those discoveries into commercial products. However, if we were to optimize that capability, think of the significant impact we could have on the economy.

As a result, the Park created an agile and focused business model that's going to focus on intelligent autonomous mobile equipment. We'll talk more about this in a minute. Further, we are connecting engineers to six specific technology areas directly related to the needs of industry. Thus, enabling us to bridge the gap between discovery and societal benefit.



BUSINESS MODEL

We create solutions that solve global problems then transition those products into the market.

Revenue generated by our engineering projects and product solutions is reinvested to ensure our mission thrives.

Our model will serve as a catalyst to drive growth for the State of North Dakota

NDSU RESEARCH & TECHNOLOGY PARK

The next thing we focused on was creating a new business model, one that was going to allow us to become profitable and continue to reinvest those profits into funding our core operations in future years. ***This model will create multiple revenue streams by engaging in contracts directly with the commercial market and military to design, engineer, and test advance automation and robotics prototypes.*** As we move through my testimony, you'll hear about future plans to move beyond prototyping along with how we are going to build the expertise to do so.

SUCCESSFUL BUSINESS MODELS



- ✓ Rapid proof-of-concept and in-depth development and testing
- ✓ \$800 million in Sales
- ✓ 27 years of making robotics a reality
- ✓ 850+ individual inventions
- ✓ 120 start-ups



- ✓ Rapid proof-of-concept, prototyping and commercialization
- ✓ 80 years of innovations
- ✓ 13,000 patents filed (100+ active licenses)
- ✓ 50+ spin-off companies/30+ start-ups in portfolio



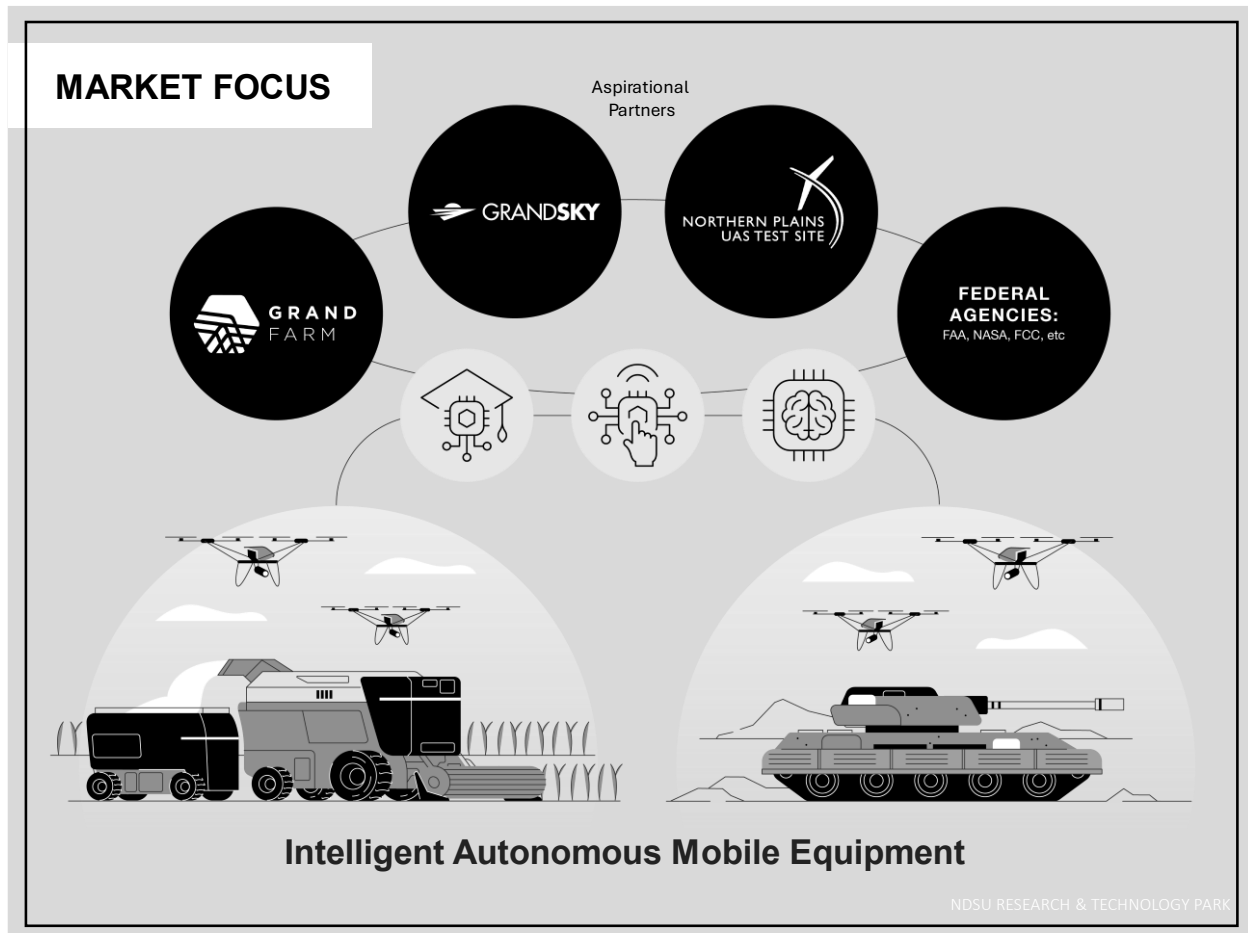
- ✓ \$40 million hypersonic and applied research facility
- ✓ Single location for industry partners to work on materials and manufacturing innovations and test capabilities
- ✓ Vertically integrated prototyping center to design and manufacture
- ✓ Opened June 6, 2023

NDSU RESEARCH & TECHNOLOGY PARK

As this business model started to take shape, we began looking into whether others were doing similar activities. It turns out that yes, a few are. For example, Carnegie Mellon's National Robotics Engineering Center (often referred to as NREC) has core functions like what we are going to start doing. As you can see on this slide, they conduct rapid proof-of-concept and in-depth development and testing. They have been highly successful with their model generating \$800 Million in Revenue over the years.

SRI stands for the [Stanford Research Institute](#). They also conduct similar activities but do go beyond into other means of commercialization activities. Both NREC and SRI have had significant start-ups created and spun out because of their model.

Finally, Purdue University. Last summer they opened a manufacturing innovation and test center. They are a vertically integrated prototyping center that will go beyond that stage and into manufacturing.

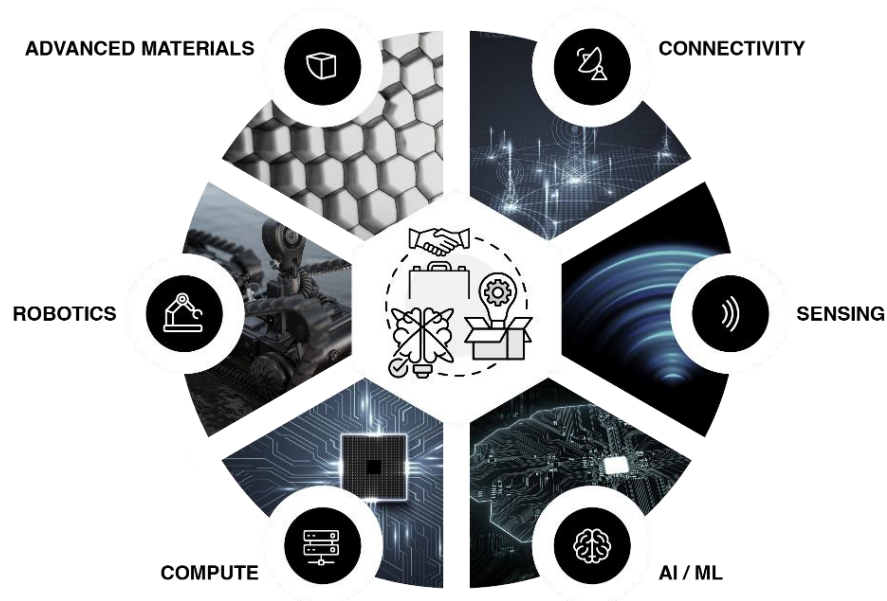


While our vision and business model were starting to take shape, we turned our attention to market focus. We can't be everything to everyone, so we are focusing on the precision ag and defense markets. The technical problems that exist in making a ground and air system work seamlessly are the same in precision ag and defense. You wouldn't necessarily know that unless you spent time working in both industries like me and my Chief Technology Officer have.

An underlying enabler is also the Energy market. To do the types of activities we are going to talk more about we need power – computational power – which means we need Energy Innovation. ***We want to compliment the work the EERC is doing by focusing on robotics and AI to advance that industry while they continue the great work they are doing in energy and geology.***

Also, as you can see, we want to leverage the environmental test capabilities that exist in the State. We have no intentions of duplicating those efforts but instead leveraging them.

CONVERGENCE OF TECHNOLOGIES TO SOLUTIONS



NDSU RESEARCH & TECHNOLOGY PARK

To develop intelligent autonomous mobile equipment, we needed to identify the key technologies that we were going to build a team and industry expertise around. As you can see by this slide, when you peel back the technical layers of what goes into developing autonomous equipment, key technologies rise to the top. They need to be connected to networks to enable them to work in all kinds of different environments. They need to be able to sense and think. We need to leverage AI as a tool to give them utility or purpose so they can perform specific tasks and so forth.

Recently, I hired Josh Gelinske to serve as the Park's Chief Technology Officer. He brings significant technical expertise in several of these areas like connectivity, sensing, and artificial intelligence. He's now tasked with developing a high-caliber, high-performing team of engineers and industry experts to begin working on contracts and/or our own products. You'll hear more about our model in just a minute.



CARNEGIE MELLON UNIVERSITY NATIONAL ROBOTICS ENGINEERING CENTER



- World leader in engineering robotics solutions for agriculture, defense, mining, automotive, and energy.
- Develop and mature robotic technologies from concept to commercialization.
- Rapid proof-of-concept demonstration followed by in-depth development and testing.

\$800

Million in Sales

27Years of Making
Robotics a
Reality**350+**Projects
Successfully
Delivered**850+**Individual
Inventions**160+**Robotics
Experts

✓ Targeted robotics partner

✓ Access to technical expertise in world-leading robotics

✓ Highly respected reputation

✓ Acceleration of Park's vision and strategy

✓ Intellectual property policies and procedures already accepted by the private sector and military

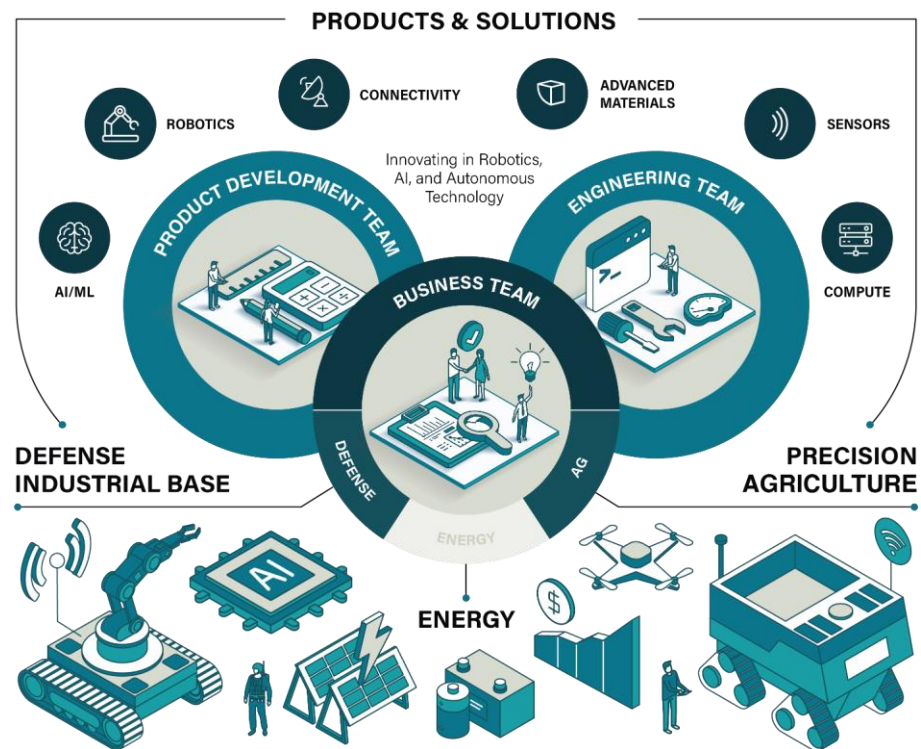
NDSU RESEARCH & TECHNOLOGY PARK

Back in February of last year, we reached out to Carnegie Mellons' National Robotics Engineering Center as we wanted to visit and learn more. As time progressed, we discovered they were looking for a strategic partner. They also see what we see and want further diversification in precision ag and defense.

We have since entered into a Letter of Intent with NREC and are in the process of working through a collaborative agreement with them. Mr. Jeff Legault, Associate Director, NREC will follow with testimony and explain NREC's support of this project.

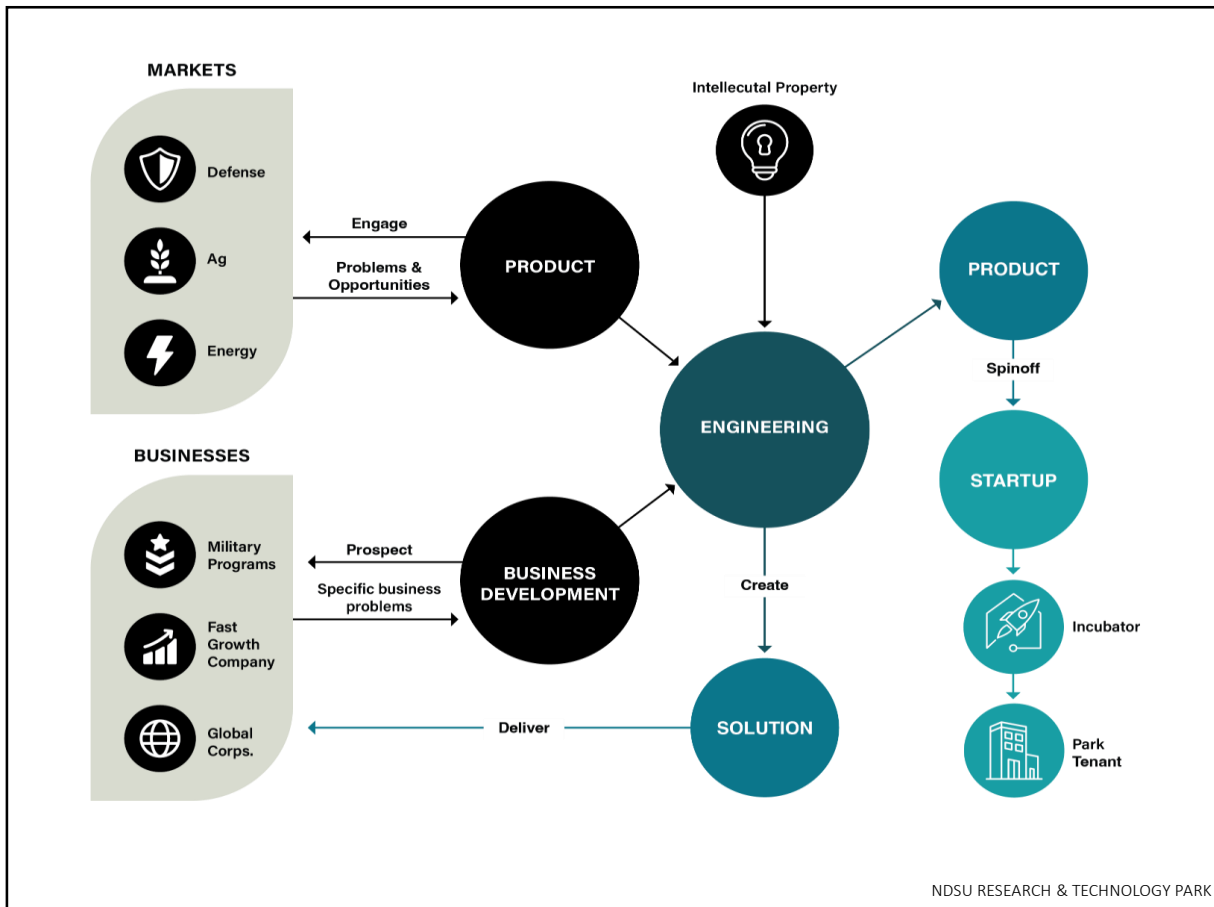
Win-Win Partnerships. NREC brings significant technical expertise to the table in niche areas. They are a highly respected global leader in robotics, having deployed robotics on every continent around the world. In addition, you don't generate the level of Revenue that they have without having figured out the IP strategy to engage with the commercial market and military. All of this will enable us to accelerate our vision. In turn, NREC has access to complimentary technical skills in areas they have an interest in, a strategic partner to collaborate with on federal programs, and a fast-track to further market opportunities.

OUR ECOSYSTEM



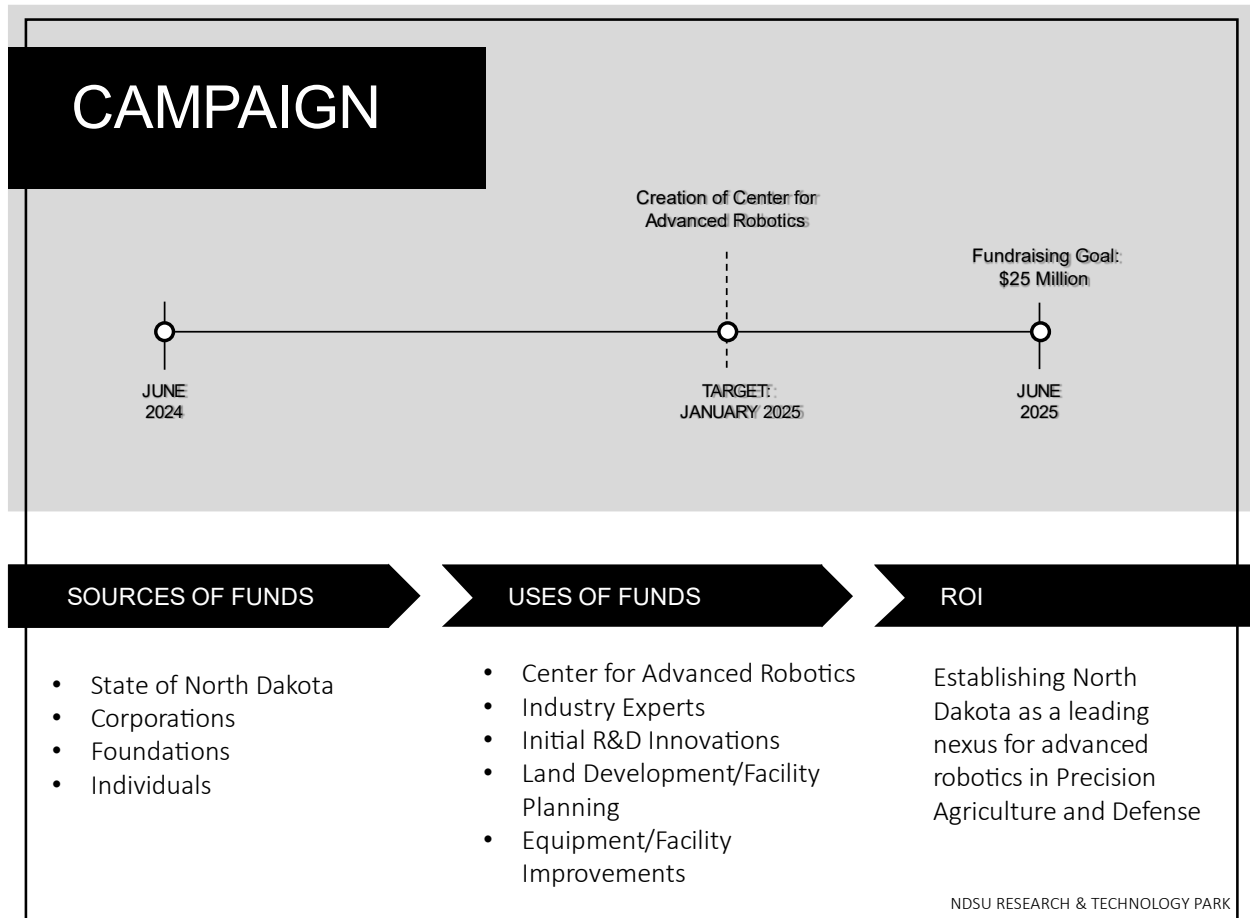
Let's bring this back to us. This is a look at the future state of the Park. Starting in the center of the screen these are the key teams we are building internally. They will connect us to the markets we serve and the key technologies we plan to focus on that you see at the top of the screen.

The result of this is going to be the impact we bring. **Advanced automation addressing jobs that continue to remain unfilled.** Technology advancements and new product development that enables the commercial market and military to improve their Return on Investment by further integrating intelligent autonomous mobile equipment into their operations.



If we peel back another layer, you can see the markets we are going to serve on the left as we engage with them to determine which problems and opportunities to focus on. Those will be pushed to our Engineering team where they'll either leverage existing IP from others or create our own. The result is going to be either a solution that is then delivered back to our customer or a product that we decide to spin out. This will create our own internal pipeline of start-ups to fill the incubator with some subset of those growing large enough to become a tenant in the Park.

We will still work with other start-ups in the region and across the State, but this model allows us to also lean into our own activities and create an internal pipeline of start-ups.



As I close, we are in the process of fundraising and intend to use those funds to establish a yet-to-be-named Center for Advanced Robotics, continue to hire industry experts to grow our team so we can begin engaging with the private sector and military, and/or begin working on our own products. We also have infrastructure needs (water and sewer, roads, signage, etc.) to develop some land in the Park. Finally, we need to make some facility improvements to accommodate the electronics equipment we need to start layering into the 8,000 sq ft Innovation Studio that we have in the Technology Incubator.

ECONOMIC EFFECTS EXPECTED IN NORTH DAKOTA

JOBS	PAYROLL	SALES	VALUE ADD
<p>Total of 900+ jobs will be created in the region</p> <ul style="list-style-type: none"> • 900+ jobs will be on-going each year • 400+ direct₂ • 400+ ripple effect jobs 	<p>\$375M+ in new payroll/benefits in the region₁</p> <ul style="list-style-type: none"> • \$80M+ in recurring payroll/benefit • \$100K+ average direct annual salary₂ • \$70K+ average ripple effect salary 	<p>\$900M+ in sales to businesses in the region₁</p> <ul style="list-style-type: none"> • \$250M+ sales will be on-going each year • \$180M+ in direct sales₂ • \$70M+ in ripple effect sales 	<p>\$300M+ in contribution to Gross State Product₁</p> <ul style="list-style-type: none"> • \$60M+ will be ongoing each year • \$10M+ in direct₂ • \$50M+ in ripple effect
<p>1. 10 Year Cumulative, ND Region 2. Research Park Operations + Spinoff Startups</p>			



Our Return on Investment is centered around establishing North Dakota as a leading nexus for advanced robotics in precision ag and defense. Today there are **620 jobs in the Park with an average total salary of roughly \$52,402,790**. When we fast forward 10 years and turn around, we want those years to have counted.

This is a very preliminary and conservative look at the economic effect which is building on the foundation we have today. We worked with outside parties to develop an initial look at the Year 10 effect which includes additional job creation and economic impact.

We started with the question, Why? Why are we doing this? The answer – we believe we have the right industry experience and the pieces in North Dakota to excel in bringing advanced automation and robotics to industry and the military. Now is the time to do so. We believe the future impact on the State will be profound.

Thank you for your time and consideration of our request. I'm happy to answer any questions you may have.

2025 HOUSE STANDING COMMITTEE MINUTES

Government and Veterans Affairs Committee Pioneer Room, State Capitol

SB 2256
3/20/2025

Relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

9:31 a.m. Chairman Schauer opened the meeting.

Members present: Chairman Schauer, Representatives Bahl, C. Brown, TJ Brown, Grindberg, Karls, McLeod, Rohr, Schneider, Steiner, VanWinkle, Vetter, Wolff
Members absent: Vice Chairman Satrom

Discussion Topics:

- Funding

9:32 a.m. Representative TJ. Brown explains proposed amendments relating to funding for the research park fund. Possible 7.5 million dollars grant and a 7.5 million dollar line of credit for two years. Next session the second 7.5 could be deferred. LC 25.0792.03001 (Testimony #45370)

9:44 a.m. Brenda Wyland, CEO of NDSU Research & Technology Park, answered questions for the committee.

9:48 a.m. Chairman Schauer closed the meeting.

Jackson Toman, Committee Clerk by Risa Berube

25.0792.03001
Title.

Prepared by the Legislative Council
staff for House Government and
Veterans Affairs Committee
March 20, 2025

Sixty-ninth
Legislative Assembly
of North Dakota

PROPOSED AMENDMENTS TO FIRST ENGROSSMENT

ENGROSSED SENATE BILL NO. 2256

Introduced by

Senators Sorvaag, Patten, Sickler, Davison

Representatives Nathe, Swiontek

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- 12 c. Enter into contracts or agreements with federal, private, and nonprofit
- 13 organizations to carry out the selected research topics and projects; and
- 14 d. Accept donations, grants, contributions, and gifts from any source to finance the
- 15 selected research topics and projects.
- 16 5. Annually, the research technology park shall report all research activities, product
- 17 development, and accomplishments to the industrial commission and the legislative
- 18 management. Upon request, the research technology park shall report to the
- 19 appropriations committees of the legislative assembly on the use of funding under this
- 20 section.

21 **SECTION 2. TRANSFER - STRATEGIC INVESTMENT AND IMPROVEMENTS FUND TO**
22 **RESEARCH TECHNOLOGY PARK FUND.** The office of management and budget shall transfer
23 the sum of ~~\$15,000,000~~ \$7,500,000 from the strategic investment and improvements fund to the
24 research technology park fund, during the biennium beginning July 1, 2025, and ending
25 June 30, 2027.

26 **SECTION 3. BANK OF NORTH DAKOTA - INDUSTRIAL COMMISSION - LINE OF**
27 **CREDIT - RESEARCH TECHNOLOGY PARK FUND - DEFICIENCY APPROPRIATION**
28 **REQUEST.** If the funding in the research technology park fund is insufficient for the distributions
29 from the research technology park fund, the industrial commission may borrow up to
30 \$7,500,000 through a line of credit from the Bank of North Dakota during the biennium
31 beginning July 1, 2025, and ending June 30, 2027, the proceeds of which must be deposited in

Sixty-ninth
Legislative Assembly

- 1 the research technology park fund. The interest rate on the line of credit may not exceed the
- 2 prevailing interest rate charged to North Dakota governmental entities. If the industrial
- 3 commission accesses the line of credit, the industrial commission or the Bank shall request a
- 4 deficiency appropriation from the legislative assembly to repay the line of credit.

2025 HOUSE STANDING COMMITTEE MINUTES

Government and Veterans Affairs Committee Pioneer Room, State Capitol

SB 2256
3/20/2025

Relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

2:38 p.m. Chairman Schauer opened the meeting.

Members present: Chairman Schauer, Vice Chairman Satrom, Representatives Bahl, C. Brown, TJ Brown, Grindberg, Karls, McLeod, Rohr, Schneider, Steiner, VanWinkle, Vetter, Wolff

Discussion Topics:

- Proposed Amendment

2:41 p.m. Representative Schneider moved to amend the bill LC#25.0792.03001, previous testimony #45370.

2:41 p.m. Vice Chairman Satrom seconded the motion.

2:45 p.m. Lisa Feldner, NDSU Research Park, testified and answered questions.

2:47 p.m. Representative Schneider rescinded the motion.

2:47 p.m. Chairman Schauer closed the meeting.

Jackson Toman, Committee Clerk

2025 HOUSE STANDING COMMITTEE MINUTES

Government and Veterans Affairs Committee Pioneer Room, State Capitol

SB 2256
3/27/2025

Relating to a research technology park fund; to provide a continuing appropriation; to provide a transfer; and to provide a report.

3:14 p.m. Chairman Schauer opened the meeting.

Members present: Chairman Schauer, Vice Chairman Satrom, Representatives Bahl, TJ Brown, Grindberg, Karls, McLeod, Rohr, Schneider, Steiner, VanWinkle, Vetter, Wolff
Members absent: Representative C. Brown

Discussion Topics:

- Committee action

3:17 p.m. Representative Grindberg introduced the proposed amendments LC#25.0792.03002 #44365.

3:21 p.m. Brenda Wyland, CEO NDSU Research and Technology Park, testified and answered questions.

3:28 p.m. Vice Chairman Satrom moved to adopt amendment, LC#25.0792.03002.

3:28 p.m. Representative McLeod seconded the motion.

Representatives	Vote
Representative Austen Schauer	Y
Representative Bernie Satrom	Y
Representative Landon Bahl	Y
Representative Collette Brown	Y
Representative Timothy Brown	Y
Representative Karen Grindberg	Y
Representative Karen Karls	Y
Representative Carrie McLeod	Y
Representative Karen M. Rohr	Y
Representative Mary Schneider	Y
Representative Vicky Steiner	N
Representative Lori VanWinkle	N
Representative Steve Vetter	Y
Representative Christina Wolff	Y

3:29 p.m. Motion passed 11-2-1.

3:30 p.m. Representative McLeod moved a Do Pass as amended and rerefer to appropriations.

3:30 p.m. Vice Chairman Satrom seconded the motion.

Representatives	Vote
Representative Austen Schauer	Y
Representative Bernie Satrom	Y
Representative Landon Bahl	Y
Representative Collette Brown	AB
Representative Timothy Brown	Y
Representative Karen Grindberg	Y
Representative Karen Karls	Y
Representative Carrie McLeod	Y
Representative Karen M. Rohr	N
Representative Mary Schneider	Y
Representative Vicky Steiner	Y
Representative Lori VanWinkle	Y
Representative Steve Vetter	Y
Representative Christina Wolff	N

3:31 p.m. Motion passed 11-2-1.

Representative Karls will carry the bill.

3:33 p.m. Chairman Schauer adjourned the meeting.

Jackson Toman, Committee Clerk

Sixty-ninth
Legislative Assembly
of North Dakota

**PROPOSED AMENDMENTS TO
FIRST ENGROSSMENT**

VG 3/27/25
1 of 3

ENGROSSED SENATE BILL NO. 2256

Introduced by

Senators Sorvaag, Patten, Sickler, Davison

Representatives Nathe, Swiontek

- 1 A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota
2 Century Code, relating to a research technology park fund grant program; to provide a
3 continuing appropriation; ~~to provide a transfer~~; and to provide a report.

4 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

- 5 **SECTION 1.** A new section to chapter 54-17 of the North Dakota Century Code is created
6 and enacted as follows:

7 **Research technology park fund grant program - North Dakota state university--**
8 **Continuing appropriation - Report.**

- 9 1. The industrial commission shall administer the research technology park fund is a
10 special fund in the state treasury. All moneys deposited in the fund and interest upon
11 moneys in the fund are appropriated on a continuing basis to grant program. Subject to
12 legislative appropriations, the industrial commission for distribution shall distribute grant
13 funding to the research technology park at North Dakota state university. The research
14 technology park shall use the funds in accordance with this section.
15 2. The research technology park at North Dakota state university is created to conduct
16 exploratory, transformational, and innovative research and product development
17 activities that advance intelligent autonomous mobile equipment opportunities and
18 benefit the state's economy and environment through:

- 1 a. Exploratory research and development of technologies and methodologies that
2 facilitate the prudent development and efficient use of the state's autonomous
3 agriculture resources and defense capabilities;
- 4 b. Access to advanced robotics and artificial intelligence expertise for timely
5 scientific and engineering activities to support the state's interests; and
- 6 c. Education and outreach related to the state's advanced technology resources,
7 including the advancement of engineering and technical readiness.
- 8 3. Each biennium, the research technology park shall develop a plan for the use of funds
9 received under this section, including industry matching requirements. The plan must
10 be approved by the industrial commission.
- 11 4. The research technology park may:
 - 12 a. Select research topics and projects;
 - 13 b. Enter ~~into~~ contracts or agreements with other institutions of higher education to
14 support the selected research topics and projects;
 - 15 c. Enter ~~into~~ contracts or agreements with federal, private, and nonprofit
16 organizations to carry out the selected research topics and projects; and
 - 17 d. Accept donations, grants, contributions, and gifts from any source to finance the
18 selected research topics and projects.
- 19 5. Annually, the research technology park shall report all research activities, product
20 development, and accomplishments to the industrial commission and the legislative
21 management. Upon request, the research technology park shall report to the
22 appropriations committees of the legislative assembly on the use of funding under this
23 section.

24 **SECTION 2. ~~TRANSFER~~ APPROPRIATION - INDUSTRIAL COMMISSION - STRATEGIC**
25 **INVESTMENT AND IMPROVEMENTS FUND TO- RESEARCH TECHNOLOGY PARK**
26 **~~FUND~~ GRANT PROGRAM - ONE-TIME FUNDING.** ~~The office of management and budget shall~~
27 ~~transfer~~ There is appropriated out of any moneys in the strategic investment and improvements
28 fund, not otherwise appropriated, the sum of \$15,000,000 from the strategic investment and
29 improvements fund to the research technology park fund, or so much of the sum as may be
30 necessary, to the industrial commission for the purpose of providing grants under the research
31 technology park grant program pursuant to section 1 of this Act, during the biennium beginning

1 July 1, 2025, and ending June 30, 2027. Of the \$15,000,000, the industrial commission shall
2 distribute a grant of \$7,500,000 to the research technology park without a matching requirement
3 and may distribute a grant of up to \$7,500,000 to the research technology park only to the
4 extent the research technology park provides one dollar of matching funds from nonstate
5 sources for each dollar of grant funding distributed under the program. The funding provided in
6 this section is considered a one-time funding item.

**REPORT OF STANDING COMMITTEE
ENGROSSED SB 2256**

Government and Veterans Affairs Committee (Rep. Schauer, Chairman) recommends **AMENDMENTS** ([25.0792.03002](#)) and when so amended, recommends **DO PASS** and **BE REREFERRED** to the **Appropriations Committee** (11 YEAS, 2 NAYS, 1 ABSENT OR EXCUSED AND NOT VOTING). SB 2256 was placed on the Sixth order on the calendar.

25.0792.03002
Title.

Prepared by the Legislative Council
staff for Representative Schneider
March 21, 2025

Sixty-ninth
Legislative Assembly
of North Dakota

PROPOSED AMENDMENTS TO FIRST ENGROSSMENT

ENGROSSED SENATE BILL NO. 2256

Introduced by

Senators Sorvaag, Patten, Sickler, Davison

Representatives Nathe, Swiontek

1 A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota
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3 agriculture resources and defense capabilities;
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5 scientific and engineering activities to support the state's interests; and
- 6 c. Education and outreach related to the state's advanced technology resources,
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25 **INVESTMENT AND IMPROVEMENTS FUND ~~TO~~ RESEARCH TECHNOLOGY PARK**
26 **~~FUND~~GRANT PROGRAM - ONE-TIME FUNDING. ~~The office of management and budget shall~~**
27 ~~transfer~~There is appropriated out of any moneys in the strategic investment and improvements
28 fund, not otherwise appropriated, the sum of \$15,000,000 ~~from the strategic investment and~~
29 ~~improvements fund to the research technology park fund,~~ or so much of the sum as may be
30 necessary, to the industrial commission for the purpose of providing grants under the research
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3 and may distribute a grant of up to \$7,500,000 to the research technology park only to the
4 extent the research technology park provides one dollar of matching funds from nonstate
5 sources for each dollar of grant funding distributed under the program. The funding provided in
6 this section is considered a one-time funding item.

2025 HOUSE APPROPRIATIONS

SB 2256

2025 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee Roughrider Room, State Capitol

SB 2256
4/7/2025

A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota Century Code, relating to a research technology park grant program; to provide an appropriation; and to provide a report.

9:31 a.m. Chairman Vigesaa opened the meeting.

Members present: Chairman Vigesaa, Representatives Anderson, Berg, Bosch, Brandenburg, Fisher, Hanson, Louser, Martinson, Meier, Monson, Murphy, Nathe, O'Brien, Pyle, Richter, Sanford, Stemen, Swiontek, Wagner

Members absent: Vice Chairman Kempenich, Representatives: Mitskog, J. Nelson

Discussion Topics:

- Parks Business Model
- Robotics Center
- Technological Expertise

9:31 a.m. Representative Schauer introduced the bill and submitted testimony #44716.

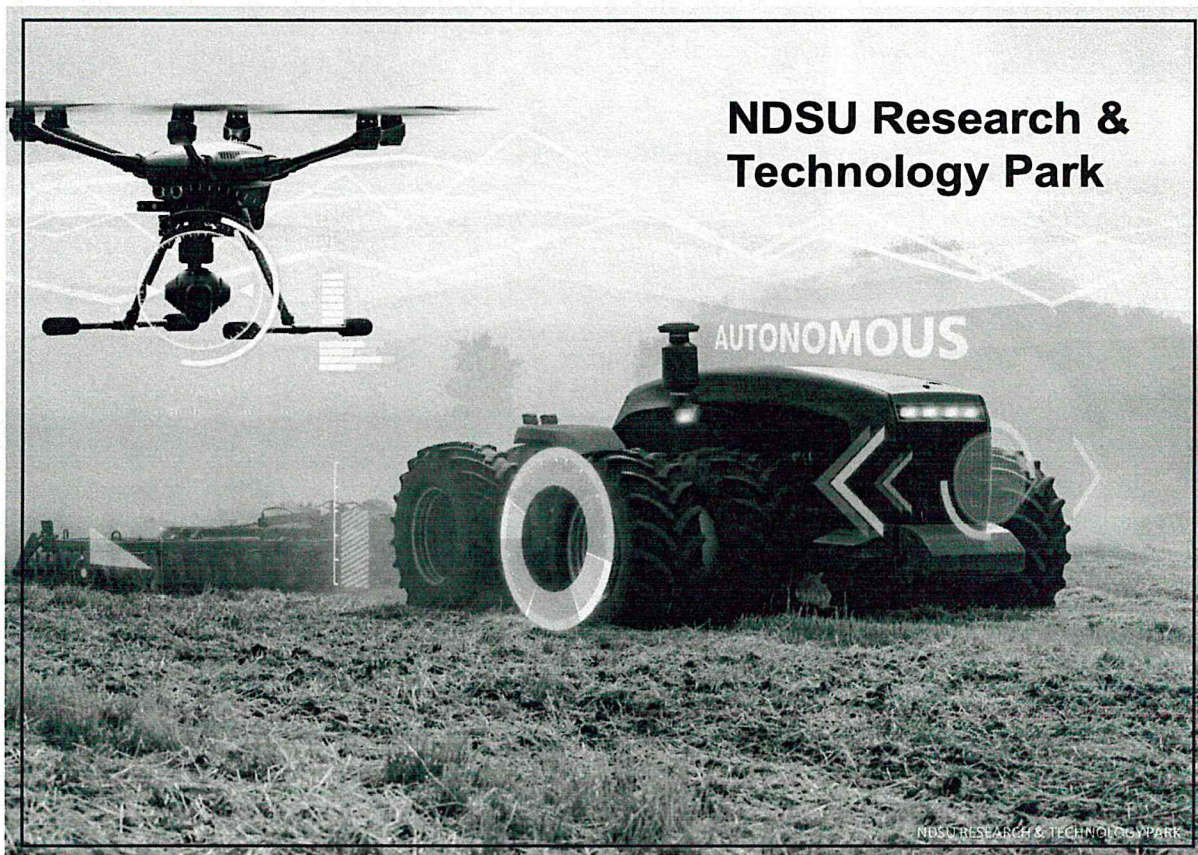
9:38 a.m. Brenda Wyland, Chief Executive Officer, NDSU Research and Technology Park testified In Favor and answered questions and submitted testimony #44715.

9:55 a.m. Chairman Vigesaa closed the meeting.

Krystal Eberle, Committee Clerk

NDSU

RESEARCH AND TECHNOLOGY PARK



Mr. Chairman and members of the committee, I'm Brenda Wyland and I serve as the CEO of the NDSU Research and Technology Park in Fargo located on NDSU's campus. I'm here today testifying in strong support of SB2256. This bill requests \$20 Million to support the new vision and path forward we are going to share with you today.

This is my return to the Research Park. I was with the Park from 2008-2013. Prior to my return to the Park, I spent the last 10 years in the private sector working for a fast-growth technology company primarily focusing on starting and leading our government and defense division before jumping back over to the precision ag side of the business.

A little over a year ago, I was recruited back to the Park to create a bold new vision and business model.

We intentionally started with a few goals in mind. We didn't want to duplicate key assets in the State like Grand Farm, Grand Sky, or the Northern Plains UAS Test Site. Instead, we wanted to find a way to leverage them and contribute to their success in a meaningful way.



PROBLEM STATEMENT

North Dakota State University (NDSU) is a leading educational and research institution but is not positioned to convert research discoveries into commercial products that support the rapidly evolving needs of industry.

OPPORTUNITY

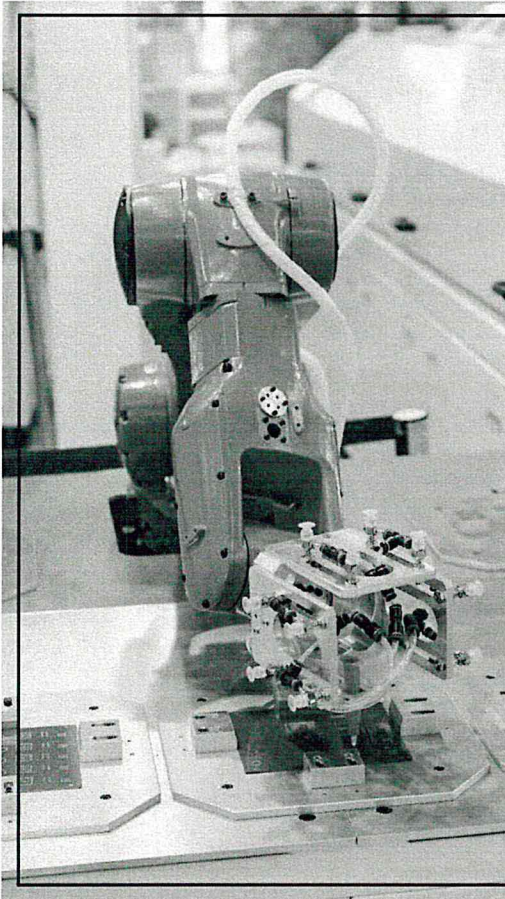
Emphasize the productization of *intelligent autonomous mobile equipment*.

Connect world class engineers and researchers in six specific technology areas to the needs of industry.

Bridge the needs of the global marketplace with the convergence of technologies to solutions.

We also spent time looking at the role of the University and that of the Park. NDSU is a leading educational and research institution, but, like many other Universities, it is not positioned to convert those discoveries into commercial products. However, if we were to optimize that capability, think of the significant impact we could have on the economy.

As a result, the Park created an agile and focused business model that's going to focus on intelligent autonomous mobile equipment. We'll talk more about this in a minute. Further, we are connecting engineers to six specific technology areas directly related to the needs of industry. Thus, enabling us to bridge the gap between discovery and societal benefit.



BUSINESS MODEL

We create solutions that solve global problems then transition those products into the market.

Revenue generated by our engineering projects and product solutions is reinvested to ensure our mission thrives.

Our model will serve as a catalyst to drive growth for the State of North Dakota

NDSU RESEARCH & TECHNOLOGY PARK

The next thing we focused on was creating a new business model, one that was going to allow us to become profitable and continue to reinvest those profits into funding our core operations in future years. ***This model will create multiple revenue streams by engaging in contracts directly with the commercial market and military to design, engineer, and test advance automation and robotics prototypes.*** As we move through my testimony, you'll hear about future plans to move beyond prototyping along with how we are going to build the expertise to do so.

SUCCESSFUL BUSINESS MODELS



- ✓ Rapid proof-of-concept and in-depth development and testing
- ✓ \$800 million in Sales
- ✓ 27 years of making robotics a reality
- ✓ 850+ individual inventions
- ✓ 120 start-ups



- ✓ Rapid proof-of-concept, prototyping and commercialization
- ✓ 80 years of innovations
- ✓ 13,000 patents filed (100+ active licenses)
- ✓ 50+ spin-off companies/30+ start-ups in portfolio



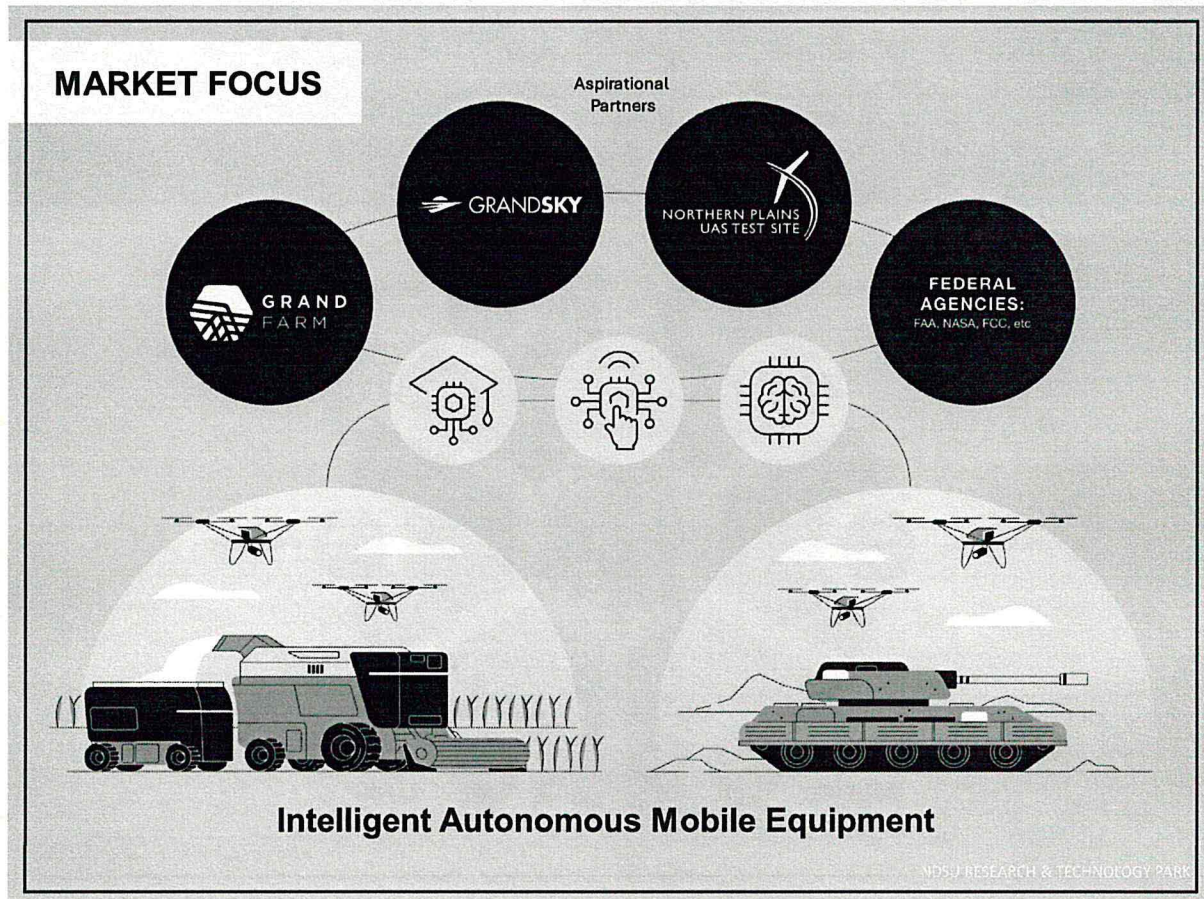
- ✓ \$40 million hypersonic and applied research facility
- ✓ Single location for industry partners to work on materials and manufacturing innovations and test capabilities
- ✓ Vertically integrated prototyping center to design and manufacture
- ✓ Opened June 6, 2023

NDSU RESEARCH & TECHNOLOGY PARK

As this business model started to take shape, we began looking into whether others were doing similar activities. It turns out that yes, a few are. For example, Carnegie Mellon's National Robotics Engineering Center (often referred to as NREC) has core functions like what we are going to start doing. As you can see on this slide, they conduct rapid proof-of-concept and in-depth development and testing. They have been highly successful with their model generating \$800 Million in Revenue over the years.

SRI stands for the [Stanford Research Institute](#). They also conduct similar activities but do go beyond into other means of commercialization activities. Both NREC and SRI have had significant start-ups created and spun out because of their model.

Finally, Purdue University. Last summer they opened a manufacturing innovation and test center. They are a vertically integrated prototyping center that will go beyond that stage and into manufacturing.

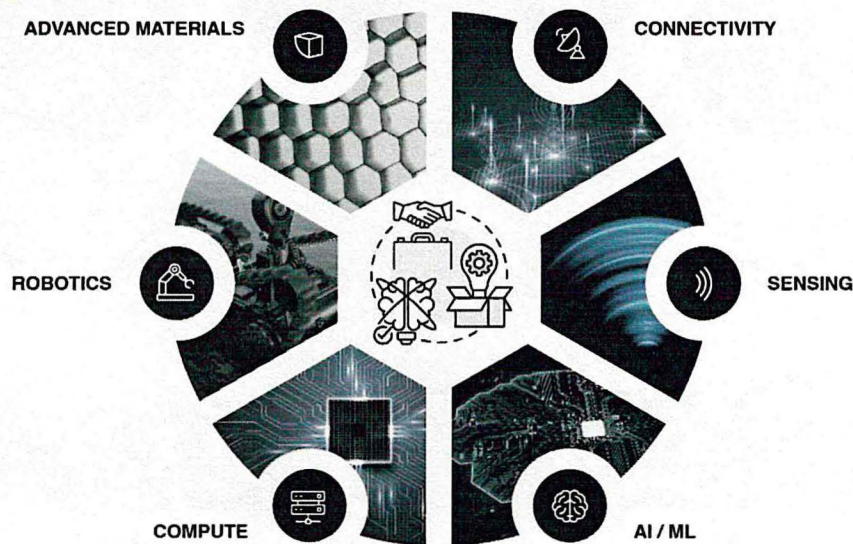


While our vision and business model were starting to take shape, we turned our attention to market focus. We can't be everything to everyone, so we are focusing on the precision ag and defense markets. The technical problems that exist in making a ground and air system work seamlessly are the same in precision ag and defense. You wouldn't necessarily know that unless you spent time working in both industries like me and my Chief Technology Officer have.

An underlying enabler is also the Energy market. To do the types of activities we are going to talk more about we need power – computational power – which means we need Energy Innovation. ***We want to compliment the work the EERC is doing by focusing on robotics and AI to advance that industry while they continue the great work they are doing in energy and geology.***

Also, as you can see, we want to leverage the environmental test capabilities that exist in the State. We have no intentions of duplicating those efforts but instead leveraging them.

CONVERGENCE OF TECHNOLOGIES TO SOLUTIONS



NDSU RESEARCH & TECHNOLOGY PARK

To develop intelligent autonomous mobile equipment, we needed to identify the key technologies that we were going to build a team and industry expertise around. As you can see by this slide, when you peel back the technical layers of what goes into developing autonomous equipment, key technologies rise to the top. They need to be connected to networks to enable them to work in all kinds of different environments. They need to be able to sense and think. We need to leverage AI as a tool to give them utility or purpose so they can perform specific tasks and so forth.

Recently, I hired Josh Gelinske to serve as the Park's Chief Technology Officer. He brings significant technical expertise in several of these areas like connectivity, sensing, and artificial intelligence. He's now tasked with developing a high-caliber, high-performing team of engineers and industry experts to begin working on contracts and/or our own products. You'll hear more about our model in just a minute.



CARNEGIE MELLON UNIVERSITY NATIONAL ROBOTICS ENGINEERING CENTER



- World leader in engineering robotics solutions for agriculture, defense, mining, automotive, and energy.
- Develop and mature robotic technologies from concept to commercialization.
- Rapid proof-of-concept demonstration followed by in-depth development and testing.

\$800
Million in Sales

27

Years of Making
Robotics a
Reality

350+
Projects
Successfully
Delivered

850+

Individual
Inventions

160+
Robotics
Experts

✓ Targeted robotics partner

✓ Access to technical expertise in world-leading robotics

✓ Highly respected reputation

✓ Acceleration of Park's vision and strategy

✓ Intellectual property policies and procedures already
accepted by the private sector and military

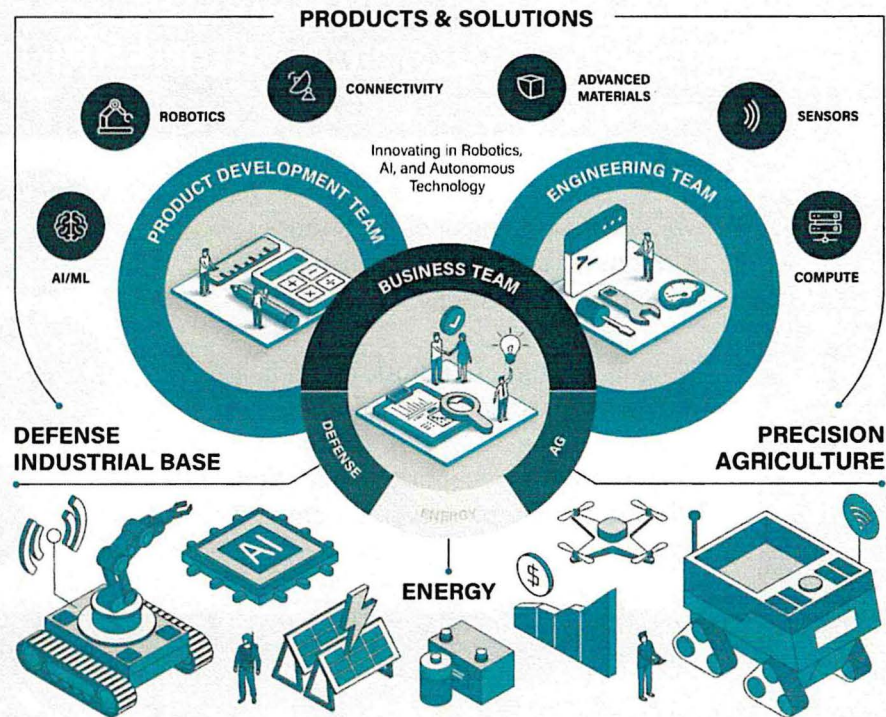
NDSU RESEARCH & TECHNOLOGY PARK

Back in February of last year, we reached out to Carnegie Mellons' National Robotics Engineering Center as we wanted to visit and learn more. As time progressed, we discovered they were looking for a strategic partner. They also see what we see and want further diversification in precision ag and defense.

We have since entered into a Letter of Intent with NREC and are in the process of working through a collaborative agreement with them. Mr. Jeff Legault, Associate Director, NREC will follow with testimony and explain NREC's support of this project.

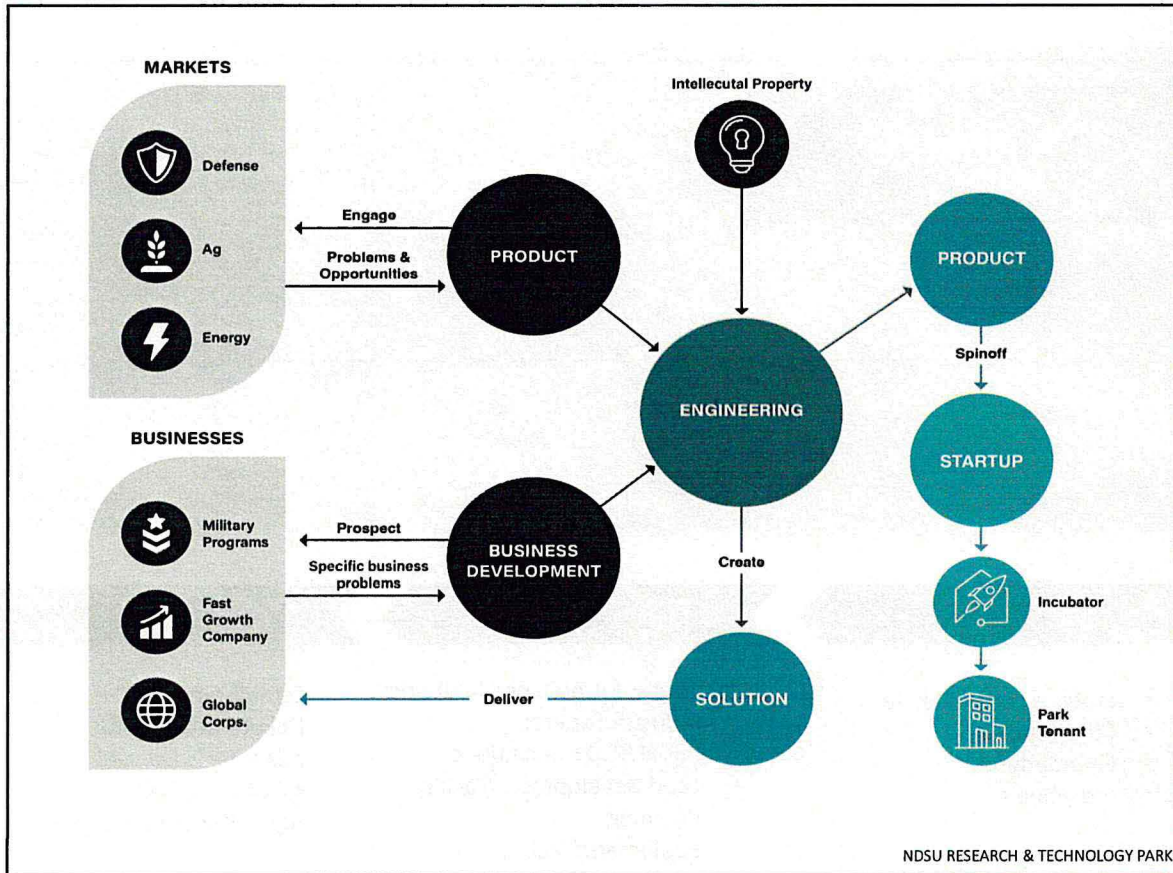
Win-Win Partnerships. NREC brings significant technical expertise to the table in niche areas. They are a highly respected global leader in robotics, having deployed robotics on every continent around the world. In addition, you don't generate the level of Revenue that they have without having figured out the IP strategy to engage with the commercial market and military. All of this will enable us to accelerate our vision. In turn, NREC has access to complimentary technical skills in areas they have an interest in, a strategic partner to collaborate with on federal programs, and a fast-track to further market opportunities.

OUR ECOSYSTEM



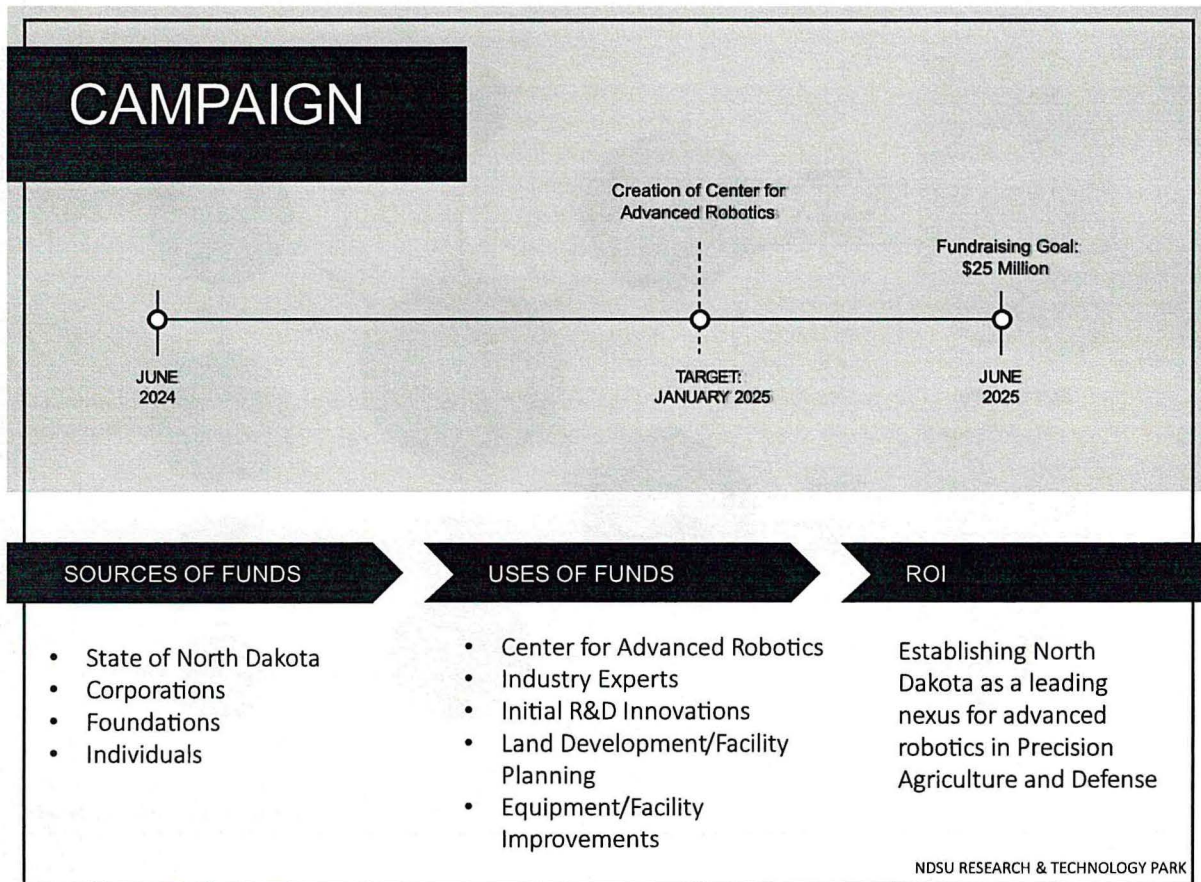
Let's bring this back to us. This is a look at the future state of the Park. Starting in the center of the screen these are the key teams we are building internally. They will connect us to the markets we serve and the key technologies we plan to focus on that you see at the top of the screen.

The result of this is going to be the impact we bring. **Advanced automation addressing jobs that continue to remain unfilled.** Technology advancements and new product development that enables the commercial market and military to improve their Return on Investment by further integrating intelligent autonomous mobile equipment into their operations.



If we peel back another layer, you can see the markets we are going to serve on the left as we engage with them to determine which problems and opportunities to focus on. Those will be pushed to our Engineering team where they'll either leverage existing IP from others or create our own. The result is going to be either a solution that is then delivered back to our customer or a product that we decide to spin out. This will create our own internal pipeline of start-ups to fill the incubator with some subset of those growing large enough to become a tenant in the Park.

We will still work with other start-ups in the region and across the State, but this model allows us to also lean into our own activities and create an internal pipeline of start-ups.



As I close, we are in the process of fundraising and intend to use those funds to establish a yet-to-be-named Center for Advanced Robotics, continue to hire industry experts to grow our team so we can begin engaging with the private sector and military, and/or begin working on our own products. We also have infrastructure needs (water and sewer, roads, signage, etc.) to develop some land in the Park. Finally, we need to make some facility improvements to accommodate the electronics equipment we need to start layering into the 8,000 sq ft Innovation Studio that we have in the Technology Incubator.

ECONOMIC EFFECTS EXPECTED IN NORTH DAKOTA

JOB	PAYROLL	SALES	VALUE ADD
<p>Total of 900+ jobs will be created in the region</p> <ul style="list-style-type: none"> • 900+ jobs will be on going each year • 400+ direct₂ • 400+ ripple effect jobs 	<p>\$375M+ in new payroll/benefits in the region₁</p> <ul style="list-style-type: none"> • \$80M+ in recurring payroll/benefit • \$100K+ average direct annual salary₂ • \$70K+ average ripple effect salary 	<p>\$900M+ in sales to businesses in the region₁</p> <ul style="list-style-type: none"> • \$250M+ sales will be on-going each year • \$180M+ in direct sales₂ • \$70M+ in ripple effect sales 	<p>\$300M+ in contribution to Gross State Product₁</p> <ul style="list-style-type: none"> • \$60M+ will be ongoing each year • \$10M+ in direct₂ • \$50M+ in ripple effect
<p>1. 10 Year Cumulative, ND Region 2. Research Park Operations + Spinoff Startups</p>			



Our Return on Investment is centered around establishing North Dakota as a leading nexus for advanced robotics in precision ag and defense. Today there are **620 jobs in the Park with an average total salary of roughly \$52,402,790**. When we fast forward 10 years and turn around, we want those years to have counted.

This is a very preliminary and conservative look at the economic effect which is building on the foundation we have today. We worked with outside parties to develop an initial look at the Year 10 effect which includes additional job creation and economic impact.

We started with the question, Why? Why are we doing this? The answer – we believe we have the right industry experience and the pieces in North Dakota to excel in bringing advanced automation and robotics to industry and the military. Now is the time to do so. We believe the future impact on the State will be profound.

Thank you for your time and consideration of our request. I'm happy to answer any questions you may have.

Good morning, Mr. Chairman and members of the House Appropriations Committee.

My name is Austen Schauer, District 13, West Fargo.

Today, I am here to advocate for the continued growth and development of the **Research & Technology Park**, located in Fargo.

This is not just a request for funding; it is an investment in the future of North Dakota where we lead and excel in bringing advanced automation and robotics to agriculture, military and energy markets.

The **Research & Tech Park** is more than 20 years old and has helped grow two large precision ag companies: Deere and Appareo (now acquired by AGCO) along with dozens of successful start-up companies such as Elinor Coatings, Bushel, OmniByte, Be More Colorful, Trilogy, Aigen, and Isight Drone Services.

The Park has a solid foundation to **build on** for the future.

A new business model has been determined under new leadership based on new opportunities.

The goal is to convert research discoveries into commercial products that support the needs of ag industry and military.

The Park's business model emphasizes three key areas:

- **Developing intelligent autonomous mobile equipment, essentially advanced automation and robotics.**
- **Connecting top engineers and research in six specific tech areas to meet the needs of ag industry and military.**
- **Bridge the needs of the global marketplace with technologies to solve problems.**

But will this business model work? The answer is, yes.

Consider Carnegie Mellon's National Robotics Engineering Center (NREC) in Pittsburgh.

It conducts rapid proof-of-concept and in-depth development and testing. Over the last 30 years, this business model has generated more than \$800m in revenue.

Consider similar business models at Stanford Research Institute and Purdue University.

Stanford has produced more than 13 thousand patents, many of which have turned into commercial products.

Purdue, last summer, opened a manufacturing innovation and test center which takes products directly into the private sector. It goes well beyond prototypes.

Once the business model was established, Park leadership turned its attention to **market focus**.

The Park can't be everything to everyone, so it's *leaning* into the strengths of North Dakota, focusing on precision agriculture and defense markets.

The technical problems that exist in making ground and air systems work seamlessly are the same in precision ag and defense. That according to the Park's CEO **Brenda Wyland** and CTO **Josh Gelinske** who have worked for many years in both industries.

To solve technical issues in precision ag and defense, and to market those solutions, the Park is building a team of engineers to focus on: **Advanced Materials, Robotics, Computational Sciences, Connectivity, Sensing, and AI**.

The effort is already paying off as the Research Park and Carnegie Mellon Robotics Center in Pittsburg have entered a letter of intent and are in the process of working through a collaborative joint agreement.

The associate director of the Robotics Center, **Jeff Lagault**, testified in person at our GVA hearing.

It is a win-win partnership allowing the Park to figure out the **IP strategy** to engage with the commercial ag market and military, all of which will accelerate vision and success.

Also testifying in person was retired **Brigadier General James Cluff**, US Air Force who worked with Miss Wyland in the private sector. He gave his full endorsement of this project.

The Research and Tech Park is **not** part of NDSU, but it can bridge the gap between university discovery and commercial products.

The Park is **not** in competition with Grand Sky, Grand Farm, Northern Plains UAS Test Site, or EERC but it can **leverage all** to bring more opportunities to the State.

Mr. Chairman, members of the committee, by no means is the current Research Park a failure. Today, more than 600 people work in the Park (at various businesses) with an average total salary of more than \$52 million.

However, with new leadership, new focus and a new mission, the goal is to be bigger, better, and more profitable.

How?

- **Royalties paid for intellectual property created by the Park.**
- **Revenue from engineering contracts with major global corporations, defense contractors, and fast growth companies to design, engineer and test advanced automation and robotics prototypes.**
- **Ground lease income paid by tenants in the Park with an existing or future location.**
- **Lease income paid by clients in the technology incubator.**

However, to unlock its full potential, the Park must invest in its infrastructure, industry experts, and the entrepreneurial environment that fosters new ideas.

This is where you can help.

By providing \$7.5m in grant money and an additional \$7.5 million in **one-to-one** matching funds, the Park can **dive deep** into bringing together academia, industry leaders, engineers, and investors to **accelerate** the commercialization of products to industry.

SB 2256 puts the oversight of State funding and reporting within the Industrial Commission and Legislative Management.

The funding is one-time only.

How best do we ensure our future in tech innovation, business growth, and educational excellence in North Dakota?

It happens with great leadership, necessary financial support, partnerships, and opportunity.

We believe these critical components are at the Research and Technology Park and with your support, we can take our place alongside Carnegie Mellon, Stanford Research Institute, and Purdue.

The Research Park plan is not aspirational; it is ready to be achieved.

I respectfully ask for your support with **SB 2256**.

Thank you, Mr. Chairman and Committee members.

I stand open for questions along with Park CEO Brendy Wyland.

2025 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee Roughrider Room, State Capitol

SB 2256
4/15/2025

A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota Century Code, relating to a research technology park grant program; to provide an appropriation; and to provide a report.

8:49 a.m. Chairman Vigesaa opened the meeting.

Members present: Chairman Vigesaa, Vice Chairman Kempenich, Representatives Anderson, Bosch, Brandenburg, Fisher, Hanson, Louser, Martinson, Meier, Mitskog, Monson, Murphy, Nathe, Nelson, O'Brien, Pyle, Richter, Sanford, Stemen, Swiontek, Wagner

Representative absent: Berg

Discussion Topics:

- Committee Action

8:50 a.m. Representative Stemen moved to reduce \$7.5 million to \$5 million.

8:50 a.m. Representative O'Brien seconded the motion.

8:53 a.m. Roll Call Vote

Representatives	Vote
Representative Don Vigesaa	Y
Representative Keith Kempenich	Y
Representative Bert Anderson	Y
Representative Mike Berg	AB
Representative Glenn Bosch	Y
Representative Mike Brandenburg	Y
Representative Jay Fisher	Y
Representative Karla Rose Hanson	N
Representative Scott Louser	Y
Representative Bob Martinson	Y
Representative Lisa Meier	Y
Representative Alisa Mitskog	Y
Representative David Monson	Y
Representative Eric J. Murphy	N
Representative Mike Nathe	Y
Representative Jon O. Nelson	Y
Representative Emily O'Brien	Y
Representative Brandy L. Pyle	N
Representative David Richter	Y
Representative Mark Sanford	Y

Representative Gregory Stemen	Y
Representative Steve Swiontek	Y
Representative Scott Wagner	Y

8:53 a.m. Motion passed 19-3-1.

8:54 a.m. Representative Stemen moved Do Pass as Amended.

8:54 a.m. Representative O'Brien seconded the motion.

8:54 a.m. Roll Call Vote

Representatives	Vote
Representative Don Vigesaa	Y
Representative Keith Kempenich	Y
Representative Bert Anderson	Y
Representative Mike Berg	AB
Representative Glenn Bosch	Y
Representative Mike Brandenburg	Y
Representative Jay Fisher	Y
Representative Karla Rose Hanson	Y
Representative Scott Louser	Y
Representative Bob Martinson	Y
Representative Lisa Meier	Y
Representative Alisa Mitskog	Y
Representative David Monson	Y
Representative Eric J. Murphy	Y
Representative Mike Nathe	Y
Representative Jon O. Nelson	Y
Representative Emily O'Brien	Y
Representative Brandy L. Pyle	Y
Representative David Richter	Y
Representative Mark Sanford	Y
Representative Gregory Stemen	Y
Representative Steve Swiontek	Y
Representative Scott Wagner	Y

8:54 a.m. Motion passed 22-0-1.

8:54 a.m. Representative Karls will carry the bill.

8:54 a.m. Chairman Vigesaa closed the meeting.

Krystal Eberle, Committee Clerk

April 15, 2025

Sixty-ninth
Legislative Assembly
of North Dakota

**PROPOSED AMENDMENTS TO
FIRST ENGROSSMENT**

CO
4/15/25
1043

ENGROSSED SENATE BILL NO. 2256

Introduced by

Senators Sorvaag, Patten, Sickler, Davison

Representatives Nathe, Swiontek

In place of the amendments (25.0792.03002) adopted by the House, Engrossed Senate Bill No. 2256 is amended by amendment (25.0792.03003) as follows:

- 1 A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota
2 Century Code, relating to a research technology park fund grant program; to provide a
3 continuing an appropriation; ~~to provide a transfer~~; and to provide for a report.

4 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

- 5 **SECTION 1.** A new section to chapter 54-17 of the North Dakota Century Code is created
6 and enacted as follows:

7 **Research technology park fund grant program - North Dakota state university-**

8 **Continuing appropriation - Report.**

- 9 1. The industrial commission shall administer the research technology park ~~fund is a~~
10 special fund in the state treasury. All moneys deposited in the fund and interest upon
11 moneys in the fund are appropriated on a continuing basis to grant program. Subject to
12 legislative appropriations, the industrial commission ~~for distributions~~ shall distribute grant
13 funding to the research technology park at North Dakota state university. The research
14 technology park shall use the funds in accordance with this section.
15 2. The research technology park at North Dakota state university is created to conduct
16 exploratory, transformational, and innovative research and product development
17 activities that advance intelligent autonomous mobile equipment opportunities and
18 benefit the state's economy and environment through:

- 1 a. Exploratory research and development of technologies and methodologies that
2 facilitate the prudent development and efficient use of the state's autonomous
3 agriculture resources and defense capabilities;
- 4 b. Access to advanced robotics and artificial intelligence expertise for timely
5 scientific and engineering activities to support the state's interests; and
- 6 c. Education and outreach related to the state's advanced technology resources,
7 including the advancement of engineering and technical readiness.
- 8 3. Each biennium, the research technology park shall develop a plan for the use of funds
9 received under this section, including industry matching requirements. The plan must
10 be approved by the industrial commission.
- 11 4. The research technology park may:
 - 12 a. Select research topics and projects;
 - 13 b. Enter ~~into~~-contracts or agreements with other institutions of higher education to
14 support the selected research topics and projects;
 - 15 c. Enter ~~into~~-contracts or agreements with federal, private, and nonprofit
16 organizations to carry out the selected research topics and projects; and
 - 17 d. Accept donations, grants, contributions, and gifts from any source to finance the
18 selected research topics and projects.
- 19 5. Annually, the research technology park shall report all research activities, product
20 development, and accomplishments to the industrial commission and the legislative
21 management. Upon request, the research technology park shall report to the
22 appropriations committees of the legislative assembly on the use of funding under this
23 section.

24 **SECTION 2. ~~TRANSFER~~ APPROPRIATION - INDUSTRIAL COMMISSION - STRATEGIC**
25 **INVESTMENT AND IMPROVEMENTS FUND ~~TO~~ RESEARCH TECHNOLOGY PARK**
26 **~~FUND~~ GRANT PROGRAM - ONE-TIME FUNDING.** ~~The office of management and budget shall~~
27 ~~transfer~~ There is appropriated out of any moneys in the strategic investment and improvements
28 fund in the state treasury, not otherwise appropriated, the sum of \$15,000,000 from the strategic
29 ~~investment and improvements fund to the research technology park fund~~ \$10,000,000, or so
30 much of the sum as may be necessary, to the industrial commission for the purpose of providing
31 grants under the research technology park grant program pursuant to section 1 of this Act,

- 1 during the biennium beginning July 1, 2025, and ending June 30, 2027. Of the \$10,000,000, the
- 2 industrial commission shall distribute a grant of \$5,000,000 to the research technology park
- 3 without a matching requirement and may distribute a grant of up to \$5,000,000 to the research
- 4 technology park only to the extent the research technology park provides one dollar of matching
- 5 funds from nonstate sources for each dollar of grant funding distributed under the program. The
- 6 appropriation in this section is considered a one-time funding item.

**REPORT OF STANDING COMMITTEE
ENGROSSED AND AMENDED SB 2256**

Appropriations Committee (Rep. Vigesaa, Chairman) recommends **AMENDMENTS** ([25.0792.03003](#)) and when so amended, recommends **DO PASS** (22 YEAS, 0 NAYS, 1 ABSENT OR EXCUSED AND NOT VOTING). Engrossed SB 2256, as amended, was placed on the Sixth order on the calendar.

2025 CONFERENCE COMMITTEE

SB 2256

2025 SENATE STANDING COMMITTEE MINUTES

Appropriations - Education and Environment Division Sakakawea Room, State Capitol

SB 2256
4/28/2025
Conference Committee

A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota Century Code, relating to a research technology park grant program; to provide an appropriation; and to provide for a report.

1:59 p.m. Chairman Meyer called the meeting to order.

Members Present: Chairman Sorvaag, Senator Wobbema, Senator Thomas.
Representative Stemen, Representative Fisher, Representative Schauer.

Discussion Topics:

- 1:1 Match for Non-State Sectors.

2:00 p.m. Rep. Stemen provided clarification on house changes

2:01 p.m. Rep. Schauer testified in favor of the house changes.

2:02 p.m. Chairman Sorvaag responded to house changes and questioned the matching aspect of the bill.

2:04 p.m. Rep. Schauer expressed desire to keep the bill as is.

2:05 p.m. Chairman Meyer adjourned the meeting.

Steven Hall, Committee Clerk

2025 SENATE STANDING COMMITTEE MINUTES

Appropriations - Education and Environment Division Sakakawea Room, State Capitol

SB 2256
5/01/2025
Conference Committee

A BILL for an Act to create and enact a new section to chapter 54-17 of the North Dakota Century Code, relating to a research technology park grant program; to provide an appropriation; and to provide for a report.

10:29 a.m. Chairman Sorvaag called the meeting to order.

Members Present: Chairman Sorvaag, Senator Wobbema, Senator Thomas.
Representative Stemen, Representative Fisher, Representative Schauer.

Discussion Topics:

- Grant and Match Program for Non-State Sectors.

10:29 a.m. Chairman Sorvaag began committee discussion regarding the house position on the match for the grant.

10:30 a.m. Representative Shauer states the House stands firm on the position of \$5 million grant and \$5 million match.

10:31 a.m. Senator Thomas moved the Senate accept the House Amendments.

Senator Wobbema seconded the motion.

Roll Call Vote - Motion Passed 6-0-0.

Senator Wobbema will carry the bill.

Representative Schauer will carry the bill.

10:32 a.m. Chairman Sorvaag closed the meeting.

Steven Hall, Committee Clerk

SB 2256 050125 1036 AM Roll Call Vote

Final Recommendation

SB 2256

Date Submitted: May 1, 2025, 10:36 a.m.

Recommendation: Accept

Amendment LC #: 25.0792.03003

Engrossed LC #: N/A

Motioned By: Thomas, Paul J.

Seconded By: Wobbema, Mike

House Carrier: Schauer, Austen

Senate Carrier: Wobbema, Mike

Emergency Clause: None

Vote Results: 6 - 0 - 0

Description: To accept Research Tech Park Grant Program funding

Sen. Sorvaag, Ronald	Yea
Sen. Thomas, Paul J.	Yea
Sen. Wobbema, Mike	Yea
Rep. Stemen, Gregory	Yea
Rep. Fisher, Jay	Yea
Rep. Schauer, Austen	Yea

**REPORT OF CONFERENCE COMMITTEE
ENGROSSED SB 2256**

Your conference committee (Sens. Sorvaag, Thomas, Wobbema and Reps. Stemen, Fisher, Schauer) recommends the **SENATE ACCEPT** the House amendments ([25.0792.03003](#)) to Engrossed SB 2256.

Engrossed SB 2256 was placed on the Seventh order of business on the calendar.