

Meeting of the Iron Range Resources and Rehabilitation Board

Monday, June 7, 2021 – 10:30 a.m.

In accordance with Governor Walz's Executive Order 20-01 and due to the COVID-19 pandemic, the meeting will be held via ZOOM and live-streamed through YouTube as authorized by MN Statute 13D.021

Access to view the meeting will be posted on our website. [MN.GOV/IRRRB](https://mn.gov/irrrb)

**Meeting of the Iron Range Resources and Rehabilitation Board
ZOOM Meeting
Wednesday, June 10, 2020 – 10:30 a.m.**

TABLE OF CONTENTS

AGENDA	- 3 -
FY21 Community and Development Infrastructure Projects.....	- 4 -
Iron Range Higher Education Account	- 7 -
FY22 Budget	33
Addendum A – FY22 Budget	A
Addendum B – IRRRB April 30, 2021, Meeting Minutes.....	i

**MEETING OF THE IRON RANGE RESOURCES
AND REHABILITATION BOARD
Monday, June 7, 2021 – 10:30 a.m.
ZOOM MEETING**

In accordance with Governor Walz's Executive Order 20-01 and due to the COVID-19 pandemic, the meeting is being held by ZOOM and is being live-streamed through YouTube as authorized by MN Statute 13D.021.

AGENDA

- 1) Call to Order
- 2) Roll Call
- 3) Approval of April 30, 2021, Minutes
See Addendum B
- 4) Commissioner's Comments
- 5) Business Development Project
- 6) FY21 Community and Development Infrastructure Projects
- 7) Iron Range Higher Education Account
- 8) FY22 Budget
See Addendum A
- 9) Other
- 10) Adjournment

FY21 Community and Development Infrastructure Projects



P.O. Box 441
4261 Highway 53 South
Eveleth, Minnesota 55734-0441
(218)735-3000 • 800-765-5043

Date: 6/07/2021

To: Iron Range Resources and Rehabilitation Board

From: Mark Phillips
Commissioner

RE: FY21 COMMUNITY AND DEVELOPMENT INFRASTRUCTURE PROJECTS

PURPOSE

Community Infrastructure grants assist communities with projects that support residential and public facility development.

Development Infrastructure grants assist communities with projects that support economic development.

ECONOMIC IMPACT

FY21 infrastructure projects	3
Iron Range Resources & Rehabilitation investment	\$775,000
Total investment	\$13,673,647
Leverage public/private	1:16

COMMUNITY INFRASTRUCTURE

City of Babbitt

Grant Amount: \$250,000

The project consists of phase I construction of a new wastewater treatment facility. Several components of the existing plant are over 50 years old, and some portions of the facility are 68 years old. The facility has reached the end of its useful life, and it is not economically and technologically viable to renovate. The MPCA indicated that a new low-level mercury limit will be added to the city's next plant

operation permit, which will require the facility to be replaced and rehabilitated in order to meet the new permit limits. The project also includes lining or replacement of old sewer collection system piping. The project is expected to create 45 construction jobs.

USES		SOURCES	
Wastewater treatment facility construction	\$6,062,500	Iron Range Resources & Rehabilitation	\$250,000
Contingency	425,000	City (PFA loan)	1,995,160
A&E	865,000	PSIG grant	2,607,340
		WIF grant	2,500,000
TOTAL	\$7,352,500	TOTAL	\$7,352,500

DEVELOPMENT INFRASTRUCTURE

Chisholm-Hibbing Airport Authority

Grant Amount: \$350,000

The project consists of infrastructure and sitework for the construction of a new corporate commercial hangar. The airport will demolish a 5,250-square-foot building/hangar and construct a new 21,000-square-foot hangar that will support the business and corporate aviation needs of its customers and clients. A two-bay hangar will be developed. One bay will be used to service transient aircraft, and the other bay will be leased to a tenant to store and maintain their business aircraft operations. Additional construction associated with the project includes the reconstruction of 35,000squarefeet of existing aircraft apron area, construction of an 8,000-square-foot parking area, construction of a 2,000-square-foot access road, and the removal of approximately 500 square feet of existing apron pavement. The larger hangar will provide additional revenue for the airport in the form of lease payments and increased aircraft fuel sales. The project is expected to create two permanent and 35 construction jobs.

USES		SOURCES	
Infrastructure and road reconstruction	\$732,460	Iron Range Resources & Rehabilitation	\$350,000
Facility construction	4,432,775	Chisholm-Hibbing Airport Authority	1,780,200
Contingency	109,849	MN/DOT	560,000

A&E	165,116	Private tenant	250,000
Demo	39,375	IRRRB loan	2,500,000
		IRRRB demo	39,375
TOTAL	\$5,479,575	TOTAL	\$5,479,575

City of Virginia

Grant Amount: \$175,000

The project consists of infrastructure and site work for the construction of a professionally built 18-hole miniature golf course. The course will be built to meet ADA accessibility standards and located on a six-acre site in Virginia. The site has sat vacant since the early 1960s due to use as a storage site for concrete removal when West Chestnut Street was built. The course will operate and be open to the public May through October. The project is expected to create four permanent and six construction jobs.

USES		SOURCES	
Infrastructure and site work	\$266,300	Iron Range Resources & Rehabilitation	\$175,000
Facility and course construction	465,130	VEDA	15,000
Land acquisition	65,000	SBA	232,025
Contingency	26,630	Private	458,922
A&E	57,887		
TOTAL	\$880,947	TOTAL	\$880,947

Iron Range Higher Education Account



P.O. Box 441
4261 Highway 53 South
Eveleth, Minnesota 55734-0441
(218)735-3000 • 800-765-5043

Date: 6/07/2021

To: Iron Range Resources & Rehabilitation Board

From: Mark Phillips
Commissioner

RE: IRON RANGE HIGHER EDUCATION ACCOUNT

The Iron Range Higher Education Committee (IRHEC) is a legislatively created committee charged to advise the Commissioner of Iron Range Resources and Rehabilitation Board on providing higher education programs in the Taconite Assistance Area (TAA).

The IRHEC met on Thursday, May 20, 2021, via Zoom. The Committee welcomed new members Representative Lislegard and Senator Eichorn. Senator Eichorn was elected Chair and Governor Appointee Julie Marinucci as Vice-Chair. The Committee heard the following program updates:

- Transportation Center of Excellence
- Bell Program
- Iron Range Engineering
- Federal Relief Funding
- VisionNE

The IRHEC has approved, and I support an expenditure of up to \$795,000 of Iron Range Higher Education Account funds to provide a grant to the Northeast Higher Education District for use by the Iron Range Engineering program for the continuation of a higher education program that, in collaboration with private industry, allows students to earn a Bachelor's of Science degree in engineering from Minnesota State University Mankato.

Funding Authorization:

This expenditure is authorized under the provisions of the Iron Range Higher Education Committee and the Iron Range Higher Education Account as codified under Minnesota Statutes, Section 298.2214 and 298.28, subdivision 9d, respectively.



IRON RANGE --- ENGINEERING

Program Update

To The

Iron Range Higher Education Committee

May 20, 2021

Overview

The Iron Range Engineering (IRE) program is a Northeast Higher Education District program operated on the Mesabi Range College campus. The Minn State partners that employ the faculty and enroll the students are Mesabi, Itasca Community College, and Minnesota State University, Mankato. Initially an upper division (junior and senior year) program, IRE has expanded to lower division (freshmen and sophomore year). IRE started in 2009, began graduating students in 2011, gained ABET accreditation in 2013 and 2017, and has received national and international recognition.

IRE was honored at a recent global colloquium on the global state of the art in engineering education. Current and emerging world leaders in engineering education participated in the virtual event. Other recent recognition includes IRE Director, Christine Kennedy, being recognized as a top 100 global visionary in education and learning by GFEL (the global forum for educators and learners) and as a finalist for mentor of year by Reinvented magazine (the first all female staff STEM magazine in the United States). The program was also nominated for the Gordon Prize for Innovation in Engineering and Technology Education through the National Academy of Engineering. Results at this time are unknown.

During the recent pandemic, COVID-19 has impacted every part of society. It was up to the faculty and staff at IRE to manage uncertainty during an evolving and complex situation. Within a day of being notified that campus would be virtual, the entire curriculum was moved to a virtual format.

Fast forward to the end of the Spring 2021 semester and not only did IRE students survive, but they thrived during the pandemic. Some of the quotes from partner companies included, “We are stounded at the student success!” or, ““In comparison to what my senior design project looked like, this is amazing. Students demonstrated a resiliency and ability to adapt.” In addition to student success, IRE faculty and staff did research throughout the academic year on how to continuously improve high quality teaching and learning strategies as well as some training in advisement to help maintain positive mental health within the student body.

The current job outlook for IRE students is high. There have been more requests for IRE students to fill paid internships, cop-ops, and full time positions than in recent memory. The IRE director has gotten requests for IRE students/graduates from companies such as L&M Radiator, Cleveland Cliffs, Northeast Technical Services, Army Corp of Engineers, Highland Holdings, among many others.

Program Highlights

Enrollments and Graduates

- IRE graduates 20-25 engineers per year.
- To date, 203 students have graduated from the program.
- 65% of IRE graduates are employed as engineers in northeastern Minnesota.
- 95% of the students who started IRE have graduated or are still progressing to graduation.
- 85% of all IRE graduates came from northeastern Minnesota.
- 27% of all IRE graduates are women.
- 28% of all IRE graduates are nontraditional students.
- All graduates who have attempted to take the PE (professional engineering) exam have passed the exam.
- 20% of all IRE graduates are heading towards their PE or pursuing a graduate degree.
- 95% of graduates have employment within 6 months of graduating.
- IRE has their first class that is more than 50% female.

Projects

- IRE students complete engineering design projects for an average of 16-20 regional industries per semester.
- IRE students complete an average of 4-6 entrepreneurial projects per semester.
- To date, approximately 275 projects have been completed for industry partners. 84% of the projects were in northeastern Minnesota.

Awards and Recognitions

- IRE was honored at an MIT/University College London at a global colloquium for the Global State of the Art in Engineering Education.
 - IRE representatives were invited presenters to talk about the program.
- IRE Director, Christine Kennedy, was recognized as a top 100 global visionary in education and learning by GFEL (Global Forum for Educators and Learners).
 - She will be presented the award at the next GFEL conference, date TBD.
- IRE Director, Christine Kennedy, was a finalist for Mentor of the Year by Reinvented Magazine.
- IRE was nominated for the Gordon Prize by the National Academy of Engineering. Results at this time are unknown.
- The IRE Program has a feature in the journal of AEE (Advances in Engineering Education).
- The Kern Entrepreneurship Education Network (KEEN) which focuses on engineering education, has partnered with Iron Range Engineering to further advancement of innovative engineering education.
- PCA Boise has presented Iron Range Engineering with a \$100,000 endowment.
- Marvin Windows and Doors donates \$3,000 to IRE annually.
- Barr Engineering donates \$1,000 to IRE annually.
- A private donors donate \$6,000 to IRE annually.

- Don and Yvonne Webb:
 - Donate \$25,000 - \$30,000 in scholarships annually.
 - Are leaving an endowment in their will to the IRE program.
- Aagard awarded a \$10,000 grant to IRE for student equipment.
- girlsBEST grant (worth \$14,000) finalist for recruiting efforts.

Future Outlook

- Recruiting efforts have increased to take advantage of the virtual environment.
 - A decrease in enrollment was projected in late December 2020.
 - A compilation of every high school in MN along with teacher contacts have been completed.
 - Personalized mass emails have been utilized to send hundreds of emails to teachers at once.
 - IRE is expecting to see this increase enrollment for fall of 2022 and fall of 2023.
- The IRE program qualifies for displaced worker training.
- Research is being done on IRE as a difference maker in engineering education. World leaders are looking to IRE for guidance and are incorporating the program into their published research.
- Bell Program will be starting to offset IRE Faculty costs.

Expenses

FY2022 Budget Request for Iron Range Engineering

ESTIMATED EXPENSES	
Line Item Description	Amount
Personnel	\$ 795,000
TOTAL	\$ 795,000

The Iron Range Engineering personnel breakdown can be seen below in the section *Faculty and Staff Breakdown*. It includes number of positions, titles, and duties. Not only do these individuals teach the next generation of engineers, but they are contributors to the local economy. Many have moved to the region specifically for obtaining (and retaining) a job at IRE. These individuals have bought homes, rent, buy goods, and contribute to our Iron Range economy on a variety of levels.

Faculty and Staff Breakdown

PROFESSORS

Number of positions: 5

Supported by: IRRR

Position Description: Develop and teach technical courses, guide adjunct faculty, provide program support for advising students and curriculum changes

ADJUNCT PROFESSORS

Number of positions: 6

Supported by: 3 positions form IRRR and 3 positions in collaboration with Bell and IRE tuition revenue

Position Description: Develop and teach technical courses

ADJUNCT STAFF

Number of positions: 4

Supported by: Collaboration with Bell and IRE tuition revenue

Position Description: Facilitate design team learning, provide formal feedback to the program, provide program support

STAFF

Number of Positions: 4

Director

Supported by: IRRR

Position Description: Responsible for curriculum, faculty, staff, student, and program development, responsible for academic evaluations, execution of budget, recruit students, maintain and recruit industry partnerships

IT Specialist

Supported by: IRRR

Position Description: Responsible for maintaining and upgrading technical equipment, labs, and facilities

Administrative Assistant

Supported by: Collaboration with Bell and IRE tuition revenue

Position Description: Responsible for logistics planning, operations program support, expense reporting, special event planning, administrative duties as assigned

Staff Engineer

Supported by: Collaboration with Bell and IRE tuition revenue

Position Description: Responsible adjunct staff team development, overall planning of project facilitation, program support, and engineering marketing

The above information is accurate to the best of my knowledge.

Regards,

A handwritten signature in dark ink, appearing to read 'Christine Kennedy', with a stylized flourish at the end.

Christine Kennedy

Director of Iron Range Engineering

1001 Chestnut Street West

Virginia, MN 55792

Phone: 218-766-9536

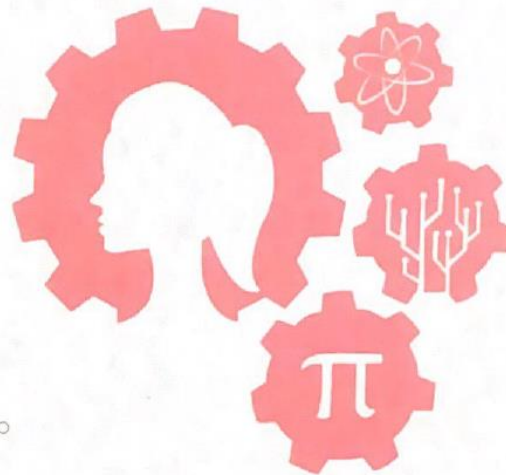
Empowering Students through Self-Determination Theory

Iron Range Engineering



Bart Johnson
Gabrielle Koepke
Christine Kennedy
Ron Ulseth

*Recognizing Reinventors
Women in STEM Finalist*



This is presented to

Christine Kennedy

For her nomination as a "Mentor of the Year" Awardee

Caeley Looney

Caeley Looney

Editor-In-Chief / Founder

July 23rd, 2020

Sponsored by:



GFEL Award Email



Christine Kennedy <christine.kennedy@ire.minnstate.edu>

[GFEL Awards Committee] Your scores are ready (Christine K Kennedy)!

5 messages

GFEL Awards Committee <awardees@gfel.world>
Reply-To: awardees@gfel.world
To: christine.kennedy@ire.minnstate.edu

Mon, Jun 22, 2020 at 8:58 AM

Hey **Christine K Kennedy**,

Hope this email finds you in the best of health and spirit.

We received a lot of incredible nominations this year, and choosing the Top 100 Visionaries in Education awardees was a very tough job for our judging committee. All nominees were adjudged on 5 parameters, namely:

1. Overall Reach
2. Industry Impact
3. Spirit Of Innovation
4. Future Readiness
5. Market Demand

After careful consideration and extensive research, our awards committee rated each applicant on every parameter to reach the final list of awardees.

We are happy to let you know that you have been selected for the **Top 100 Visionaries in Education** award to be conferred at **GFEL USA 2020** on December 8-10, 2020 at MGM Grand, Las Vegas, USA .

Please find attached with this email your nomination scorecard for your perusal.

[Find Your Scorecard](#)

Please pick a convenient date and time using the following calendar link, for our team to get in touch with you and confirm your participation at the event.

<https://bit.ly/gfel-awardee>

We congratulate you for the wonderful achievement and look forward to seeing you at the event later this year!

Best Wishes,
Awards Nomination Committee GFEL



GFEL USA 2020-Top 100 Visionaries in Education-Christine K Kennedy-4215.pdf
640K

Gordon Prize Narrative Excerpt

Description of Education Innovation

Iron Range Engineering (IRE) was created by people who believe education should be a transformative experience, balancing technical, design, and leadership learning for all students, using evidence-based activities leading to innovation and economic development.

The IRE project-based learning model has succeeded by creating an inclusive community and using self-directed learning activities such as writing learning reflections, choosing technical topics, and solving authentic industry problems by working on vertically integrated teams. Performance on teams and interaction with industry hones students' leadership.

IRE has received recognition including ABET's Innovation Award and is viewed as an "emerging world leader" in an MIT report.

Iron Range Engineering transforms engineering education for incoming community college graduates, preparing them for a lifetime of learning and leadership through meaningful, inclusive project experiences.

A. Educational paradigm for building future engineering leaders:

What is unique about this innovation? What sets it apart from other educational programs? How does it advance the process of developing engineering leadership skills and attitudes?

A decade ago, the founders nominated for this award reached a critical breaking point. They felt they could no longer be ethically complicit in perpetuating an educational paradigm they judged to be both of low value to students and patently unjust in the economic limitations it imposed on the region's population. Their passion, energy, and commitment to positive change created what is now the thriving Iron Range Engineering (IRE) model of professional engineering education.

Three issues drove their original design principles:

1. Learning experiences across the country were not aligned with the competencies needed to thrive as engineers. Curriculums were packed with technical content at the expense of leadership development and immersive design learning.
PRINCIPLE: Create a curriculum that balances learning activities in technical, design, and leadership to develop graduates whose skills align with needs of the profession.
2. The demographic imbalance between society and the engineering profession continued to be profound and systemic barriers were inherent in university engineering education.
PRINCIPLE: Create an inclusive culture and experiences that develop graduates with the ability and courage to bring social change to their profession and workplaces.
3. Pedagogical approaches were not evolving with emerging knowledge from cognitive science on how people learn. Despite mountains of evidence supporting active learning, passive learning models with only high-stakes testing of technical knowledge persisted.
PRINCIPLE: Employ evidence-based learning activities that result in long-term knowledge and skill acquisition and retention.

While these three initial principles inspired program design and drove continuous improvement, two more emerged:

PRINCIPLE: Implement the model to result in economic development to the rural region it serves.

PRINCIPLE: Develop the identity of student engineers as leaders focused on creating change and value rather than grades during their education.

What sets the educational paradigm apart from other educational programs in developing engineering leadership skills and attitudes is best understood through a student week...

Monday morning, student engineers arrive dressed in business-casual attire to the weekly professionalism workshop. This week it is on managing conflict and is delivered by Kate, a Medtronic engineering manager. Throughout the workshop, students have team discussions on personality/strength awareness, collaboration, competition, accommodation, avoidance, and compromise. They practice phrases to use for resolving conflict in difficult conversations.

In their team rooms, students hold a check-in meeting to prepare for a day of design which may include meeting with their client, creation of a matrix for design decisions, testing of a device they manufactured, documentation of their completed work, and a run-through of their upcoming design-review presentation. At 4pm, the team reconnects with their faculty mentor for a report-out.

Tuesdays and Fridays, dedicated to technical learning, find students in Learning Conversations with professors to discuss and process the engineering principles acquired in their pre-learning and being applied to their project. Conceptual learning is defended in verbal exams and then re-defended in a fundamental principles exam at the end of each semester (once an engineering principle is acquired, its knowledge is tested repeatedly). All 32 technical credits include a “deep-learning-activity” such as designing and conducting experiments or creating models (physical or computer), usually at the intersection of the technical domain and project.

Wednesday is another design day which starts and ends with a check-in meeting, includes client communication, mentoring from project mentors, monthly design reviews before a panel, and advancement of project goals. All projects are interdisciplinary and vertically-integrated, with students coming from all backgrounds and levels of engineering, while applying principles from business, ethics, STEM, and communication. One current project is the redesign of a door locking mechanism on a jet airplane for Cirrus, an aircraft manufacturer.

Students share a project-team room where they have 24x7 access. Walls are filled with diagrams, post-it notes, and blueprints. Twice per semester, they have individual personnel evaluations with their facilitator. They set improvement goals, address progress on previous goals, and get honest feedback on leadership strengths and improvement areas.

Thursday is a professional development and work day. It starts in the theater with 6 students delivering their 10-minute IRE talks, a TED-type talk on a contemporary issue they are passionate about. Recently, Rodrigo gave a talk on biomimicry as inspiration for engineering design. Students then address their work across the program, whether technical, design or professional.

The model embraces a helix approach to continuous improvement, where each loop around the helix results in growth through experience, failure, success, and feedback. Much growth results from four semesters of this development. Quantitative and qualitative evidence emerges in the following sections and is further underscored in the support letters.

B. Describe quality and impact on the home institution. Describe demonstrated effects on students (e.g., active engagement in elective student design opportunities, student retention in the engineering degree program, leadership exhibited in the program, proportion of students who pursue advance engineering education, proportion of students who pursue careers in industry), student evaluations, formal and informal assessments, results of fund-raising efforts, the extent of diffusion in the home institution, and peer recognition of the paradigm, its uniqueness, and its excellence of execution.

Effects on Students:

Students graduate as polished, confident communicators identifying as “difference makers”. IRE embraces self-determination, allowing student choice to increase intrinsic motivation and success. Students choose design projects, propose entrepreneurial projects, and have 16 electives, most student-designed. Their professionalism course each semester focuses on implementing, receiving feedback, and reflecting on the leadership skills of teaming, communicating, being inclusive, and being present, among others.

20 cohorts of students have graduated from community colleges and then graduated from IRE. Over 90% of starters have graduated. 125 projects have been completed for industry. 30 entrepreneurial projects from students have resulted in three startup companies that are still succeeding. 95% of graduates are working for companies as engineers. 25% have completed/are completing an advanced degree. 10% are professional engineers, 25% indicate they will seek licensure when eligible.

The model’s quality has attracted faculty to the institution, with the department hiring eight female faculty since founding and raising the college’s percentage of female engineering faculty from 8.6% to 32.9%. This critical mass has positively affected the experiences of college faculty and students.

Extent of institutional diffusion:

Soon after establishing IRE, the university recognized its value and established a second program based on the “IRE model” in metro Minnesota, Twin Cities Engineering. The growth of IRE and TCE spurred the creation of the Integrated Engineering department, which is quickly expanding. Recently, the Bell program was established.

While the IRE program has achieved modest growth in student diversity, regional demographics are limiting. The Bell program serves community college graduates nation-wide in a way that increases diversity and access. 25 nationwide community college instructors who embraced the need for transformative transfer pathways influenced the program design. Bell is a five-semester program. In the first semester, students acquire and polish their leadership, design, and technical skills. In the next 24 months, they are on engineering co-op placements earning >\$20/hour, gaining engineering experience, and completing technical learning through evening synchronous courses. This fall, Bell will exceed the enrollment of IRE and TCE combined. It is on a trajectory to have 350 students.

Uniqueness and assessment:

The culture of continuous improvement that pervades the program is a unique attribute. Students embrace “moving-up-the-helix” as a mantra, believing that failure and low-stakes feedback are essential to help them iteratively acquire the technical, leadership, and design skills needed to thrive on their next project, co-op, or engineering position. The staff includes PhD professors who guide technical learning and engineers who come from industry to mentor student development in leadership and design. These are often experienced Professional Engineers.

Program-level assessment includes seeking input from students, staff, and external visitors each semester. These “opportunities for improvement” are brought to an end-of-semester summit for discussion and evaluation.

Commonly, 10-15% of the learning activities change from semester to semester. This model of continuous improvement dovetails perfectly with ABET criteria and was highlighted among the reasons IRE received their innovation award.

The program uses evaluations to capture student, graduate, and supervisors' satisfaction with overall engineering skill as broken down by ABET outcomes. A recent evaluation compared IRE graduates with their peers. Graduates ranked their own abilities as better than their peers in 80% of the categories. Supervisors ranked the abilities of IRE graduates as better than those they supervised from other engineering programs in 82% of the categories. The support letter contributed by Dr. Marra speaks further to external evaluation.

Peer recognition:

Peer recognition began as other universities sent faculty teams to IRE to learn the model and its strategies (Texas A&M, Rose-Hulman, and Charles Sturt University are examples). Dr. Ulseth provides workshops and keynote addresses internationally. The IRE model has been highlighted in the International Journal of Engineering Education and Advances in Engineering Education. The program was awarded the MinnState innovation in curriculum award (twice) and was highlighted in a Minnesota Governor's state of the state address.

The most significant peer recognition came with the ABET Innovation Award (2017) and the status as an "emerging world leader" in MIT's report: Reimagining and Rethinking Engineering Education (2018). IRE is now a member of the "16 world leaders group" that meets annually to create change. The other U.S. institutions in the group are: MIT, Stanford, Olin, Purdue, and Arizona State.

Fundraising

IRE has been successful in raising funds for program development, research and assessment, facility construction, scholarships, and equipment. External funds exceeding \$10 million over ten years have come from NSF, private foundations, private donors, and competitive funds from Minnesota state agencies.

C. Transferability and Diffusion of the innovation to other institutions: Describe the nature and extent of adaptation or diffusion at other institutions

Since starting in 2010, Iron Range Engineering educational innovation has transferred and diffused to other organizations and disciplines at a pace and scope the founders could never have imagined. Within our institution, because of the distance between IRE and the main campus (280 miles), diffusion is not automatic. The fact that there are now three geographically distinct instances of the model within the department and a project-based computer science program on campus speak to the power of the model.

North Dakota State University (NDSU), adopted the IRE model for use at a research university in a model they call Innovation-Based-Learning (IBL). In IBL, students demonstrate their learning by producing innovations that address current societal needs. Students seek out funding opportunities from federal agencies like NIH, learn the underlying principles, and apply them to the innovation. The adapted IRE model is wildly successful in terms of student production of conference abstracts, papers, presentations, awards, scholarships, grant funding, patent applications, business plan competition, outreach, and other metrics. Students ranging from high-school to PhD students are on innovation teams. Perhaps the biggest impact has been on student transformation in passion and confidence.

Five graduate students in Electrical and Computer Engineering at NDSU formed an education research group to study and develop IBL. They are instrumental in refining the model, implementing it, and publishing their findings. Currently, well over 20 conference and journal papers have resulted. In 2019, IEEE awarded the Best Student Paper Award to Enrique Alvarez Vazquez, Mary Pearson, Lauren Singelmann, Ryan Striker, Ellen Swartz for their

paper, "Federal Funding Opportunity Announcements as a Catalyst of Students' Projects in MOOC Environments" at their Learning with MOOCs conference.

COVID-19 actually accelerated the diffusion due to the online nature of education during the pandemic. IBL is now diffusing and spreading to other Universities in a tertiary diffusion of the IRE model. Fall 2020, students from four universities, Minnesota State University, Mankato, NDSU, University of North Dakota (UND), and Biola (California) signed up for their institution's version of an innovation-based class but attend an all universities-at-once joint class virtually or asynchronously. Innovation teams were composed of students from all universities and residing in seven states. The model succeeded and expanded during the pandemic.

UND is implementing innovation-based learning in their graduate Biomedical Engineering program. The model is diffusing into other disciplines as the Dean of the Medical School joined an innovation team, which recently received a US patent. That team also finished in the top 10 in the Minnesota Cup business plan competition and received venture capital offers.

The adapted model continues to diffuse into other disciplines, such as microbiology, exercise science, animal and range science, and business. Students from these disciplines join innovation teams bringing true trans-disciplinary environments into innovative and meaningful experiences for all students.

For the first time, students from Sri Lanka are now team members, adding a global flair. Because of travel restrictions, they have joined the course from their home country. This affords the first 24-hour innovation cycle, where students hand off work in a global "follow the sun" model.

Fall 2021 will see continued expansion in IBL with the addition of two additional schools: 1) University of Louisville (Dr Koenig, Biomedical engineering students) and 2) Gustavus Adolphus College (Dr. Stone, Exercise Science). Beyond this, Biola University in California is in the planning stages of a general engineering program based on the adapted IRE model. The director of that effort joined the IBL research group and helped develop the adaptation.

Program faculty have created a network of community colleges, where faculty and facilitators are embedded in classes across the country. The IRE model of connecting meaningful project work and industry connections is spreading to students who would otherwise have limited access to real world motivation for their lower-division coursework. This diffusion to a diverse student population will broaden participation in the engineering profession.

Within the State of Minnesota, the Chancellor of the MinnState system has called for the development of a cross-institutional polytechnic school based on the IRE model of partnerships with industry and across institutions. The Department of Integrated Engineering will be a formal leader and model in this new enterprise.

The IRE model has shown an amazing ability to diffuse and be adopted within institutions, across institutions with different Carnegie classifications, across many disciplines, across many academic levels (high-school to Deans of Medical Schools) and now across the globe. There is diffusion and staying power in the IRE model and its adaptations.

D. Success in Producing Engineering Leaders: Describe demonstrated success in producing engineering leaders; identify individuals who have benefited from the innovation, and include their past and present positions. (Note that for new programs it takes several years after the first graduating class to generate evidence for this criterion.)

Leadership has been a programmatic outcome from the start, with students practicing skills on project teams and attending weekly seminars to learn new skills. Projects come from industry sponsors, faculty research, and student entrepreneurial ideas. These different types of projects prepare student engineers for a variety of career experiences. Students who have participated in faculty research, like Noah Bock ('15), may continue in graduate school. As an undergraduate, Noah was the first Integrated Engineering student to earn his degree with an

undergraduate research thesis. Motivated by projects using additive manufacturing, Noah explored topics related to tensile strength of fused deposition modeling parts. Building on this, he completed his PhD at the University of Minnesota on characterization of engine nanoparticle emissions in Fall 2020. He is now a Particle Scientist at TSI Incorporated.

Damaris Onchaba ('17) grew up in Kenya and moved to Minnesota where she participated in cardiovascular engineering projects that combined research and entrepreneurship for a start-up company. She is currently a project manager at rms Surgical, a medical instrumentation company, and is attending graduate school for a mechanical engineering masters.

Entrepreneurial projects are defined and championed by students. Andrew Hanegmon, EIT ('15) led a project that first evaluated the need for a local makerspace and technology incubator in northern Minnesota and then developed a business plan. His team's business plan won \$10,000 in a university innovation competition which provided seed money that led to an additional \$135,000 in external funding. Andrew is now the owner-director of this community makerspace.

Along with projects, student engineers have the option of an industry-based co-op experience. April Levar loved the idea of working at NASA or in the space industry. As a non-traditional student, she knew that balancing outside work and project work at Iron Range Engineering might take her a little longer so she planned to take five semesters rather than four to complete her upper-division coursework, graduating summa cum laude. She interned at NASA and was hired by a NASA contractor her last semester. She is currently a Systems Test Engineer - Rocket Scientist 1 at United Launch Alliance in Cape Canaveral.

This model creates positive experiences around learning. Our alumni/ae give back to the programs, both as volunteers - project mentors working with student teams, clients providing projects and advocacy, guest speakers giving advice - and staff. We have hired a number of graduates who return to IRE in order to support the development of new student engineers. Christine Kennedy ('11), M.S., a member of the first cohort, spent five years in industry and is now IRE's director, recruiting students into the lower-division program, providing industry expertise to the upper-division students, and advocating for the program to external funding agencies. Cody Mann ('17), EIT, M.Eng., a member of the 11th cohort, is the Coordinator of Facilitators for the IRE Bell Program, an extension of the IRE model that uses two years of co-op work in industry plus an intensive preparatory semester instead of four semester-long projects. Facilitators use their engineering industry experience and their passion for engineering education to support student engineers as they navigate job searches, work in industry, and learn across the technical, professional, and design competencies required for the degree.

Our graduates prove that engineering degrees lead to a wide range of career opportunities. Grant Graupmann ('12) is a captain in the US Air Force. Claire Peterlin ('16) is a career pathways program director with the Itasca Area Schools Collaborative. Spencer Johnson ('13) is a cinematographer.

Other notable graduates include Matt Hudson ('12) who has worked for Procter & Gamble since graduation, moving from engineering and leadership roles to purchasing manager for North America Beauty Care Rigid; Brian Stephenson ('13) who works in robotics and automation, first for Amazon Robotics and now for Avik Services, LLC; Eric Diep ('13) who works in medical device manufacturing, first for Medtronic and now for HighLife medical where he is a senior R&D engineer; Ryder Febo ('15), a veteran, who has worked for the Army Corps of Engineers and Circuit Check as a project manager, and now is a manufacturing test engineer at Control4+SnapAV; Araina Boyd ('18) who worked as a process engineer for Cleveland-Cliffs and is now a mineral processing engineer for Barr Engineering; and Kendall Diveley ('18) who started as a test engineer at HerdStar and is now a Business Development Project Engineer for Trusted Semiconductor Solutions. Febo, Peterlin, and Diveley all serve as project mentors, continuing to make a difference through their activity.

As the president of the university, I fully support the continued improvement of this model preparing student engineers from all socio-economic backgrounds to become leaders in the profession. We are happy to host Fellows and workshop participants to discover ways this model can be adapted to improve engineering and science education at their institutions and regions.

In concluding these five sections of the narrative, I want to thank you for consideration of this innovation for the prestigious Gordon Prize. I'm pleased to be adding the six letters of support that bring context and validation to the nomination. In my two decades of university presidency, this work by Drs. Ulseth, Bates, Ewert, Johnson, and Ms. Kennedy rises to the top in its quality, impact, and innovativeness.

Gordon Prize Letters of Support



DESIGN DIVISION
STANFORD UNIVERSITY
MECHANICAL ENGINEERING DEPARTMENT
STANFORD, CALIFORNIA 94305-4021

President Davenport
228, Wiecking Center
Minnesota State University, Mankato,
Mankato, MN 56001

Dear President Davenport,

I am writing with a very strong endorsement of your nomination of the Iron Range Engineering (IRE) model of Project-Based Learning (PBL) for recognition with the NAE Gordon Prize. By way of background, I have observed the growth of the program from an idea to full implementation, having served on the initial external national advisory board (with Jeff Froyd, Tom Litzinger, Ed Jones, and Denny Davis) for the project from 2009-2016. The founding IRE team of Dr. Ron Ulseth, along with Drs. Ewert and Johnson, based their program design on recommendations in *Educating Engineers—Designing for the Future of the Field* (of which I was the lead author), but went well beyond those recommendations to create a truly world-class educational experience for their students.

I was impressed right from the start with the IRE design team's recognition of a regional challenge in educating and retaining an engineering workforce in northeastern Minnesota. They saw this challenge as an opportunity to think creatively about the relationship between community college education and 4 year (BS) programs. The novel model they have designed and implemented lets their IRE students focus on connecting theory-to-practice, applying their academic learning in the context of real

engineering problems, and becoming part of a larger engineering network. Their emphasis on their students seeing the larger professional context of engineering, that includes ethics, entrepreneurship and business more generally, is highly commendable unique and responsive to 21st century engineering challenges. Their approach, which brings students and faculty together to work on the messiness of engineering is also helping to build a strong engineering community.

The IRE team has not only designed and implemented a strong PBL-based ABET accredited engineering program, they have also published on it (in *Advances in Engineering Education*, *International Journal of Engineering Education*, multiple chapters of edited books, and over 40 conference papers), have hosted visiting academics eager to learn about their model, and have supported its adoption at other sites across Minnesota, North Dakota, the U.S. and even several locations overseas. With all this work, I was not surprised to see IRE named in the 2018 report by Dr. Ruth Graham on “Global state of the art in engineering education” as one of the up-and-coming engineering programs in the world.

The IRE team’s innovations do not stop there, as they are actively working on expanding and sharing their model of community college-to-BS connection through the Bell program. The Bell program, which was founded in 2018 serves community college graduates nation-wide, doing so in a way that increases diversity and access. It is impressive that the IRE team has already recruited 75 community college instructors across the country as partners in this five-semester long program, a program that will soon engage 350 students well beyond northeastern Minnesota.

Particularly noteworthy is the diversity of the IRE/Bell staff. Six out of nine PhD professors and five out of 10 staff engineers are women. Those six professors are graduates of major and well-respected engineering education departments at Purdue, Clemson, Utah State, and Virginia Tech. Their ability to attract high quality professors speaks to both the value and inclusive culture of their programs.

I have written endorsement letters for past winners of the Gordon Prize. The Iron Range Engineering (IRE) model of Project-Based Learning (PBL) is just as noteworthy as those winners, and is an innovation in engineering education to be celebrated!

Sincerely,

A handwritten signature in blue ink that reads "Sheri Sheppard". The signature is fluid and cursive, with the first name "Sheri" and last name "Sheppard" clearly distinguishable.

Sheri Sheppard, Ph.D., Fellow of ASME, ASEE, AAAS
Richard Weiland Professor of Mechanical Engineering
The Bass University Fellow in Undergraduate Education
Co-Chair of Mechanical Engineering Diversity, Equity and Inclusion Committee
Stanford University



From: Andrew Hanegmon
Owner of the Iron Range Makerspace
Alumnus of Iron Range Engineering
704 West 41st Street, Hibbing MN 55746
Phone: 218-966-1192
ironrangemakerspace@gmail.com

To: Deborah M. Young; Program Officer, Award Program
National Academy of Engineering; Washington, DC

Greetings Deborah Young and Selection Committee Members,

I am writing this letter to strongly show my support of the Iron Range Engineering (IRE) nomination for the Bernard M. Gordon Prize for Innovation in Engineering and Technology Education. IRE played a considerable role in my life that led me to become who I wanted to be and achieve success in a variety of ways.

To give you a short summary of my experiences prior to college, I was simply dealt a bad hand. My intent is not to spend much time on what that means, so I will briefly illustrate my upbringing through a few short statements. I lived with my dad who was an intense drug user as were many of his frequent visitors. I worked multiple jobs to pay the bills, and my friends were all rougher characters. That hand created a mental state lacking hope and a world lacking a positive community. The last few months of my father's life were intense to say the least and made me realize that I needed something different. When he passed, I came upon an opportunity to go back to college.

Prerequisites were going well for my engineering education at another college, but they were not engaging me in the way I was seeking. I was ready to give up on my education and go backward before I found IRE. After a 15-minute tour, I knew this was where I needed to be. At the time, the most attractive component was the project-based learning style so I could finally understand why I was learning what I was learning. Later, I found the positive and supportive community to be the of the most value part of IRE. The faculty and students were all working to make the world better by bringing those around them up with them. That was something that I had not been around before, and my words could never do it justice. It was so cool! I was engaged from that moment on.

I completed my last two years of school at IRE, and every semester caused massive growth. I entered IRE a little lost to be honest. Reflection journals are an assignment focused on deep thought and helped me to identify my path and what I personally wanted for life. They also helped me get to know myself. IRE made me into an engineer, but the curriculum and learning experiences go beyond just engineering. I entered IRE afraid of being in front of a crowd. Part of the curriculum is presenting in front of a variety of audiences, and I graduated with a strong presenting ability. I used my new presentation abilities by giving a speech at my best friend's wedding in front of 200 people flawlessly (and got them all to dance!). In preparing that speech, I reflected deeply on why we were best friends and verbalized things I had never been able to say. My growth at IRE gave me a career and deepened my personal relationships with friends and family.

The Gordon Prize is focused on assisting new modalities that develop effective engineering leaders. When I reflect upon what makes an effective engineering leader, I think of IRE's curriculum breakdown: the ability to solve open-ended problems through design, the ability to facilitate and work with teams through professionalism, and the ability to apply engineering principles through technical knowledge. I see a need for the leaders in our profession to bring these three categories together to be called effective. On the day I started my IRE journey, I would not have considered myself a leader nor could I describe my strengths or weaknesses as a leader. On the day I graduated, I had developed a clear understanding of the traits I possessed that made me a leader and how to effectively use those traits to achieve results while supporting those around me. After graduating, my first position was at a company that remanufactures semi-truck electronics. As a recent graduate, I became responsible for supporting, encouraging, developing, and directing 44 employees. While I entered that position with a bit of imposter syndrome, even wondering if I could handle that much responsibility, I knew that IRE had prepared me for that moment and that I could still call upon my instructors for advice anytime. The result was success in many ways. One important leadership quality I want to highlight that I developed while at IRE is earning respect and maintaining positive relationships with my machining crew, disassemblers, assemblers, and maintenance staff. Many of these workers had not had great experiences with engineers or supervisors in the past and had no problem letting me know that. Many of the conversations I had with these diverse groups were tough conversations. I struggled to find common ground with one employee when I started this position. Before I left that role, I moved this employee to a different position better utilizing their skills and saw that employee smile for the first time in a year and a half. I attribute the successes that I had in this role to the learning I completed while working on project teams at IRE where I could try different leadership approaches in a safer space.

IRE has an approach to leadership which empowers students to become the engineers they want to be. This ability to have the choice as a student drives immense buy-in to the learning. Having control in this way brings students to identify their vision for the task at hand, which is an impressive skill to have out in industry. Many times, in industry, I have received a task to complete with minimal direction. Practicing coming up with one's own ideas on how to complete a task is directly beneficial to leaders in this profession. In my last semester at IRE, I was highly encouraged to work on a personal project that involved bringing an entrepreneurial mindset to my learning. This push and confidence from my instructors caused a fundamental shift in my perception of what I was capable of, which turned out to be much more than I expected. My team of four student engineers and I attacked the challenge of an entrepreneurial project with excitement and a "sky is the limit" approach with the constant support of the faculty. Our project won the Big Ideas Competition through our university, a business idea competition with a prize of \$10,000, successfully finishing a \$15,000 Kickstarter campaign, and obtaining a grant from a local economic development agency for \$100,000. My instructors helped me customize my learning, provided me with resources to grow, and provided inspiration for our team that we could achieve anytime we set our minds to. That combination created a group of effective leaders as we became the unique engineers we wanted to become.

All entrepreneurial projects start with motivating factors. My home, Minnesota's Iron Range, is heavily focused on mining and was having an economic downturn at the time of the project. I also had developed a deep personal drive to provide opportunities to others who were dealt a bad hand in life. My father was the healthiest when he had hobbies, and we often worked in the woodshop together. IRE gave me a community that I wanted to share beyond college engineering students. I wondered what could be if more people like me had a community culture like this? Could we reshape the entire region to have viability beyond mining? These drivers manifested into starting the Iron Range Makerspace (IRM) which was to be a physical space that housed equipment and tooling and a space for community. Members pay a monthly fee to use the facility.

how they see fit. Examples of uses include participating in hobbies like woodworking, taking classes, starting businesses, and being part of a creative community culture. I led the charge to start IRM and gathered over 200 community members willing to help in one way or another. By the time IRM purchased its building, I had developed enough presence as a leader to bring together 80 volunteers to help fix it up. We now maintain a membership population of around 160. There have been over 30 local businesses that have used our space to support and enhance their current businesses. Over 10 small businesses have begun within the walls of IRM. The most important metric of all is that we have developed and consistently maintained an open and inclusive atmosphere, encouraging creators of all ages to work together and enjoy helping each other. With the skills developed through IRE, I was able to have a very visible impact in the community that I had lost hope in. I watch some of the younger members connecting deeply with this community culture as I did at IRE; these members are finding that connection at moments in their life that open endless possibilities for their futures.

My life experiences made me think that I could not be an engineer, that I would not be successful, and that I did not fit in. IRE from day one has always made me feel like I can be an agent of change in the world around me. I would not have graduated college without this inclusivity. IRE is more than a group of faculty members trying out modern teaching methods. IRE is a powerful force building a future of engineering leaders that possess abilities that employers want and the world needs. IRE seeks diversity in every way it can be meant. IRE values the fact that my life experiences make me think differently and approach problems at different angles and set me up to lead in my community.

I hope the story of my transformation has clearly illustrated how IRE develops effective engineering leaders, as Mr. Gordon endowed this prize to recognize. It is with confidence that I say Iron Range Engineering is well deserving of the Bernard M. Gordon Prize to push innovation in engineering education even farther than we have before.

Stay moving towards your goals, here is the formula to help: $KE = \frac{1}{2}mv^2$,

Andrew Hanegmon
Owner of the Iron Range Makerspace
Alumnus of Iron Range Engineering
704 West 41st Street, Hibbing MN 55746
Phone: 218-966-1192
Email: ironrangemakerspace@gmail.com



IRON RANGE ENGINEERING

RON ULSETH
Iron Range Engineering
Virginia, Minnesota

BART JOHNSON
Itasca Community College
Grand Rapids, Minnesota

And

CHRISTINE KENNEDY
Iron Range Engineering
Virginia, Minnesota

Abstract

In this paper, we address the achievements to date and the learnings from the development and ten-year implementation of the Iron Range Engineering (IRE) program while articulating its future directions. IRE uses research-based instructional strategies to implement a project-based learning (PBL) curriculum where authentic design sits at the heart of each semester's learning experiences. Industry projects are utilized to provide the learning context that spans the three engineering domains of professional, technical, and design capabilities. Delivered as an upper-division program to graduates of community colleges, the IRE model attracts a wider gender, racial, and socio-economic diversity. The rural IRE program has been replicated once in a metro region. Both

programs have small enrollments, are resource intensive, and immerse students in two years of PBL curriculum with industry clients leading to a Bachelor of Science in Engineering. Many unique learning strategies with the potential to advance engineering education have been developed by these programs. In an effort to propagate the use of these strategies, IRE has developed a new program designed for higher enrollments while both decreasing resource intensity and further expanding the diversity of the profession. This new entity, known as the Iron Range Engineering Bell program, attracts community college graduates from across the U.S.

Using the framework of looking forward, this paper briefly describes the motivations behind the IRE model, its background, and the specific details of its philosophies and implementation. In the results section, both advancements and new learning strategies are described in a way that others can seek inspiration for possible adaptation. Finally, the new Bell program is described along with its potential for impact on change in engineering education.

Keywords: Professional Practice, Educational Setting, Diversity

INTRODUCTION

The motivations to start the Iron Range Engineering (IRE) program came from regional economics and dissatisfaction by the founders with the status quo in engineering education (Ulseth, 2016). IRE emerged from a successful community college engineering program and became a collaboration between that college, Itasca Community College, and Minnesota State University, Mankato with Mesabi Range College as the host location. . The curricular model was adapted from the Aalborg University (Denmark) model of PBL where semester projects from industry sit at the center of the curriculum. This contrasts with traditional engineering curriculums that have technical and professional learning that is separate from the student design and professional practice experience. Students who complete the program earn a Bachelor of Science in

Engineering from Minnesota State University, Mankato with a focus in mechanical, electrical, biomedical, chemical, civil, aeronautical, process, software, computer, or environmental engineering.

One of the specific aims of the startup program was to better align instructional practices with ABET outcomes (Johnson, 2016) as compared to the founders' perceptions of how traditional programs were aligned at the time. Validation of the intended alignment was received with the awarding of the 2017 ABET Innovation Award <https://vimeo.com/239716994>. The model was replicated as Twin Cities Engineering (TCE), which is hosted by another community college in Minnesota, in 2012. One of the specific learnings of the IRE and TCE models is that scalability of the industry-based PBL had not taken place and, further, that the model is resource-intensive. These learnings became the motivations behind the desire for *IRE Version 2.0*, a “future direction” for engineering education. This new model, now called the IRE Bell program, started its first cohort in August 2019. The many innovative strategies developed in the first 10 years of IRE have been translated to Bell, where community college graduates from around the U.S. spend one semester in the “Bell Academy” before spending the last two years of their education on co-op placements in industry while completing their academic requirements online. The Bell model was inspired by the Charles Sturt University engineering program in Australia (Rogalsky, Johnson, & Ulseth, 2020).



m1 IRON RANGE RESOURCES & REHABILITATION

FY 2022 Budget

*Investing resources to foster vibrant growth and
economic prosperity in northeastern Minnesota.*

FY 2022 Budget Table of Contents

INTRODUCTION	3
STRATEGIC PRIORITIES & FUNDING.....	3
FY22 BUDGET	4
PROJECTS.....	5
<i>Development Projects</i>	<i>5</i>
<i>Development Projects – DJJ Corpus Trust</i>	<i>5</i>
<i>Public Works</i>	<i>5</i>
<i>Public Works – DJJ Corpus Trust</i>	<i>5</i>
<i>Regional Trails Program</i>	<i>5</i>
<i>Projects Budget</i>	<i>5</i>
PROGRAMS.....	6
GRANTS	6
<i>Community Development.....</i>	<i>6</i>
<i>Workforce Development</i>	<i>7</i>
<i>Mineland Reclamation</i>	<i>7</i>
<i>Culture and Tourism</i>	<i>7</i>
<i>Commissioner Program</i>	<i>8</i>
<i>Application Fund</i>	<i>8</i>
<i>Programs Budget</i>	<i>9</i>
REGION III	10
GIANTS RIDGE.....	11
<i>Giants Ridge Budget.....</i>	<i>11</i>
OPERATIONAL COSTS.....	12
<i>Operational Costs Budget.....</i>	<i>12</i>

Introduction

As FY22 approaches, the people of our region, state, nation and world are adjusting to a life that was affected in unprecedented ways by the COVID-19 pandemic. Finally, restrictions are lifting, closed doors are opening, and people are gathering again to enjoy each other's company. Schools, businesses and community centers are resuming services, and restaurants, hotels and museums are readying for increased numbers of customers. And people continue to flock to the great outdoors of northeastern Minnesota.

Businesses and industries are moving from reeling and reacting, to re-starting and innovating. The pandemic forced an acceleration of workplace changes and telework that has also become a catalyst for business transformation, changes that would otherwise have taken years to evolve. And we know now that there is no going back – no return to the way things were.

Iron Range Resources & Rehabilitation is committed to helping large and small local businesses and communities access the capital they need to move beyond the COVID-19 crisis. The agency's FY22 spending plan has dedicated funds for infrastructure and broadband, essential backbones of economic growth. Community funding is also available for social and recreational assets that make this region a desirable place to live and play.

The agency supports projects that:

- Retain and create jobs.
- Leverage our agency's investment with state, federal and philanthropic funding.
- Improve the region's quality of life.

With renewed strength and optimism, northeastern Minnesota and Iron Range Resources & Rehabilitation are ready for what the future brings.

Strategic Priorities & Funding

Strategic priorities support long-term economic growth and the well-being of all people in northeastern Minnesota. The budget focuses on leveraging capital, improving the quality of life, and retaining and creating good paying jobs.

- Supporting business and industry in the region with spending of over \$13 million to foster economic growth in northeastern Minnesota through low interest loans for infrastructure, demolition, equipment, machinery, building and land acquisitions.
- Offering 18 grant programs that bolster community foundational and social assets, setting the table for business development – and funding for Giants Ridge that provides a high quality of life for all the people of the region.
- Developing the regional workforce by funding sector specific customized training and career awareness initiatives that address industry needs.
- The agency's fixed costs of supporting these strategies is 9% of the budget.



Commissioner Mark Phillips

FY22 Budget

Iron Range Resources & Rehabilitation Board	FY 2021 Budget	FY 2021 Projected	FY 2022 Budget
Resources			
Carryforward In	\$10,797,469	\$20,580,612	\$16,708,392
Current Resources			
Taconite Production Taxes	\$25,361,190	\$25,361,190	\$23,730,271
Investment Earnings	2,696,585	615,009	658,755
Loan Revenues	3,313,769	3,711,251	3,439,663
Facilities Revenues	5,312,043	116,019	5,509,542
Occupation Tax Region III	569,542	569,542	531,706
** DJJ Corpus Trust	12,220,000	12,220,000	9,260,000
Subtotal Current Resources	\$49,473,129	\$42,593,011	\$43,129,937
Total Resources	\$60,270,598	\$63,173,623	\$59,838,329
Estimated Expenditures			
Projects			
Development Projects	5,500,000	5,500,000	5,000,000
** Development Projects - DJJ Corpus Trust	0	0	2,500,000
Public Works	5,500,000	5,500,000	6,500,000
** Public Works - DJJ Corpus Trust	2,000,000	2,000,000	2,000,000
** Regional Trails Program - DJJ Corpus Trust	2,000,000	2,000,000	3,500,000
** Taconite Area Business Relief Loan Program	5,000,000	5,000,000	0
** Taconite Area Community Relief Grant Program	2,000,000	2,000,000	0
Total Projects	\$22,000,000	\$22,000,000	\$19,500,000
Programs			
Program Grants	7,422,500	7,372,500	9,370,000
Occupation Tax Region III	569,542	569,542	531,706
Total Programs	\$7,992,042	\$7,942,042	\$9,901,706
Giants Ridge	9,656,851	9,559,842	9,616,851
** Giants Ridge Capital - DJJ Corpus Trust	1,220,000	1,189,000	1,260,000
Total Giants Ridge	\$10,876,851	\$10,748,842	\$10,876,851
Operations & Development Fixed Costs	\$7,537,658	\$5,774,347	\$7,328,034
Total Budget	\$48,406,551	\$46,465,231	\$47,606,591
Estimated Carryforward Out	\$11,864,047	\$16,708,392	\$12,231,738

** DJJ Corpus Trust funds to cover Development Projects, Public Works, Regional Trails Program and Giants Ridge capital.

Projects

Development Projects - \$5,000,000

These funds are designated for economic development projects to promote business development opportunities and attract new investments to the region. To streamline approvals, improve timeliness, and better serve businesses, the Commissioner, with approval of the IRRR Board Chair, is authorized to approve development projects of \$500,000 and less for projects that meet the following conditions:

- Qualify for Iron Range Resources & Rehabilitation financing under established guidelines.
- Approved by the Technical Advisory Committee (TAC).

Development Projects – DJJ Corpus Trust - \$2,500,000

These funds cover additional Development projects.

Public Works - \$6,500,000

Public works grants help cities, townships, airport authorities, fire departments, hospital boards, utility commissions and collaborative organizations complete projects that support community and economic development. Eligible projects include, but are not limited to, publicly owned infrastructure such as wastewater, drinking water, storm water and utility systems, health care and airport facility improvements and renewable energy, energy efficiency initiatives, and broadband infrastructure.

Public Works – DJJ Corpus Trust - \$2,000,000

These funds cover additional Public Works projects.

Regional Trails Program - \$3,500,000

The Regional Trails Grant Program provides funding to assist cities and townships with trail planning, design and construction of various types of trails within the region. Trail types may include: bike, hiking, ATV and snowmobile.

Projects Budget

Development Projects	FY 2021 Budget	FY 2021 Projected	FY 2022 Budget
Development Projects	\$5,500,000	\$5,500,000	\$5,000,000
Development Projects - DJJ Corpus Trust	0	0	2,500,000
Public Works	5,500,000	5,500,000	6,500,000
Public Works – DJJ Corpus Trust	2,000,000	2,000,000	2,000,000
Regional Trails Program	2,000,000	2,000,000	3,500,000
Taconite Area Business Relief Loan Program	5,000,000	5,000,000	0
Taconite Area Community Relief Grant Program	2,000,000	2,000,000	0
Total Development Projects	\$22,000,000	\$22,000,000	\$19,500,000

Programs

Grants

Community Development

Commercial Redevelopment - \$1,000,000

Commercial Redevelopment grants fund partial and full demolition of commercial or publicly-owned structures or the clean-up of brownfield sites, making way for new development.

Residential Redevelopment - \$275,000

Residential Redevelopment grants help create cleaner and safer communities and encourage new construction by assisting in the demolition of dilapidated residential structures.

Development Partnerships - \$1,000,000

The program funds partnerships for research, education, and development-based initiatives which support long term economic growth within the region and are consistent with the Iron Range Resources & Rehabilitation mission, vision, and goals.

Downtown Streetscapes - \$200,000

The program incentivizes further investment in downtown areas and business corridors by promoting safe and attractive environments for residents, shoppers, workers and visitors. This program provides funding for highly visible and creative projects to create excitement, encourage citizen engagement and generate visible improvements.

Business Energy Retrofit - \$1,250,000

The program is funded by Iron Range Resources & Rehabilitation and administered through a partnership with Arrowhead Economic Opportunity Agency (AEOA) to assist business owners with energy efficient improvements to their buildings.

Downtown Building Rehabilitation - \$250,000

The program is funded by Iron Range Resources & Rehabilitation and administered through a partnership with Arrowhead Economic Opportunity Agency (AEOA) to assist business owners with code compliance improvements to buildings located in downtown areas.

EDA Partnership - \$300,000

This program will provide funding to the city of Virginia Economic Development Authority (EDA) to continue supporting the Downtown Commercial District Rehabilitation Program. Additional funds are available to support a pilot downtown rehabilitation program in a new community.

Minnesota Dental Foundation - \$240,000

The Dentist Recruitment program funds forgiveness grants within our service area. Funding will be used to administer the Martha Mordini Rukavina Loan Forgiveness Program. The purpose of this competitive program is to provide an incentive to attract dentists to practice general dentistry in the service area, which has a documented need for dentists to provide services to its communities and underserved populations.

Natural Resources Research Institute Partnership - \$250,000

This program will support multiple projects integral to the mission of UMD's Natural Resources Research Institute (NRRI) to serve the strategic stewardship of Minnesota's natural resources. Projects receiving funding will focus on creating high-value economic impact by leveraging northeastern Minnesota natural resource assets into commercial business opportunities.

Film Production Incentive Program - \$500,000

The Film Production Incentive Program will provide rebate incentives to attract movie production to our service area in a partnership with the Upper Minnesota Film Office. The production of movies for commercial release can provide for strong economic impact within the geographic area of the production location.

Workforce Development - \$400,000

Grants assist in workforce development by funding sector specific customized training and career awareness initiatives that emerge from industry, industry clusters, schools or collaborative partnerships that build capacity, responsiveness or innovation to address workforce needs. Funding is also available for post-secondary educational institutions and other regional workforce development partners to develop and deliver curriculum that prepares students for a seamless transition from high school or post-secondary education to the workforce.

Mineland Reclamation - \$1,100,000

The Mineland Reclamation grant programs assist communities and townships with reclaiming and reuse of mine impacted lands, identify and plan new development opportunities and provide the tools to achieve these goals. This program provides funding for highly visible reclamation. The Drilling Incentive Program helps to stimulate additional mineral exploration within the region.

Culture and Tourism

Culture and Tourism - \$375,000

Culture and Tourism grants assist cities, townships, nonprofit organizations and tribal units of government undertake projects that stimulate tourism and enrich the quality of life in communities through artistic, cultural, heritage or recreational activities.

Minnesota Discovery Center - \$1,900,000

Minnesota Discovery Center's mission is to "collect, preserve, interpret and promote the history and cultural heritage of northeastern Minnesota; and to manage, promote, sustain and develop the assets of the Discovery Center for the long-term benefit of area residents and visitors." The opening of the Redhead Mt. Park in Chisholm has provided MDC with additional opportunities for future growth.

Through FY 2022 the Sublease/Management Agreement provides an annual \$1,350,000 operating subsidy, the interest on an endowment fund and a \$150,000 challenge grant for operating or endowment fund raising. In addition to these financial terms, the budget includes \$400,000 for building capital improvements.

Commissioner Program - \$300,000

Grants under the Commissioner Program allow the agency to respond quickly to emergency situations or to support development opportunities that may not meet other program requirements.

Application Fund - \$30,000

The grant program reimburses communities, non-profits and educational organizations for up to one-half of the cost of applying for funding from other state, federal or private grant programs.

Programs Budget

Program Grants	FY 2021 Budget	FY 2021 Projected	FY 2022 Budget
Community Development			
Commercial Redevelopment	\$1,000,000	\$1,000,000	\$1,000,000
Residential Redevelopment	275,000	275,000	275,000
Development Partnerships	625,000	625,000	1,000,000
Downtown Streetscapes	200,000	200,000	200,000
Business Energy Retrofit	1,250,000	1,250,000	1,250,000
Downtown Building Rehabilitation	250,000	250,000	250,000
Research & Planning	50,000	0	0
EDA Partnership	0	0	300,000
Minnesota Dental Foundation	0	0	240,000
Natural Resources Research Institute Partnership	0	0	250,000
Film Incentive Production Program	0	0	500,000
Total Community Development	\$3,650,000	\$3,600,000	\$5,265,000
Workforce Development	\$350,000	\$350,000	\$400,000
Mineland Reclamation	\$ 1,292,500	\$ 1,292,500	\$1,100,000
Culture & Tourism			
Culture & Tourism	\$350,000	\$350,000	\$375,000
Minnesota Discovery Center	1,450,000	1,450,000	1,900,000
Total Culture & Tourism	\$1,800,000	\$1,800,000	\$2,275,000
Commissioner Program	\$300,000	\$300,000	\$300,000
Application Fund	\$30,000	\$30,000	\$30,000
Total Program Grants	\$7,422,500	\$7,372,500	\$9,370,000

Region III

State law directs Iron Range Resources & Rehabilitation to serve as the fiscal agent for Carlton and Koochiching County (Region III) grants from occupation taxes for economic and environmental development projects. Iron Range Resources & Rehabilitation does not make any funding decisions, but funds pass through under the following provisions:

- The Region III allocation is equal to the amount that would have been generated by a 1.5-cent tax imposed on each taxable ton for the preceding production year.
- By law, one-third of the portion allocated for Koochiching County must be used to fund the Koochiching County Economic Development Commission.

Region III Grant – Carlton/Koochiching	FY 2021 Budget	FY 2021 Projected	FY 2022 Budget
Region III	\$569,542	\$569,542	\$531,706

Giants Ridge

Giants Ridge Recreation Area promotes destination tourism and offers a variety of recreational opportunities that enhance the quality of life for visitors and area residents. It also supports the agency's mission to enhance and diversify the economy of the Iron Range Resources & Rehabilitation service area. Multiplier economic impacts from Giants Ridge on the local economy are estimated to be over \$55 million. Continued investments in the facility help meet customer expectations and keep Giants Ridge competitive.

Giants Ridge is a destination for amateur and high school sports and is currently the host site for the Minnesota State High School League alpine and cross country state championship races. Private sector lodging partners help fulfill hospitality needs in the recreation area and it is also home to a growing residential development population.

The facility has a single operator management contract for all recreational amenities. The model provides for expanded revenue opportunities and provides more flexibility. This budget supports reinvestment at Giants Ridge to build a better future.

Giants Ridge Budget

Giants Ridge	FY 2021 Budget	FY 2021 Projected	FY 2022 Budget
Revenue			
Operating Revenues	\$5,113,700	\$5,367,085	\$5,362,200
Investment by Type			
Operations	\$3,413,451	\$3,063,057	\$3,245,546
New Capital / Projects	1,731,700	1,731,700	1,769,105
Capital / Projects Deferred from FY20/FY21	118,000	87,000	0
Deferred Maintenance Account	500,000	500,000	500,000
Total Investment	\$5,763,151	\$5,381,757	\$5,514,651
Total Expense Budget	\$10,876,851	\$10,748,842	\$10,876,851

Operational Costs

Operational costs include day-to-day general and administrative expenses for running the agency: payroll, purchased services, indirect costs, supplies, materials, repairs and maintenance. Payroll expenses include all agency employees.

Operational Costs Budget

Operational Costs	FY 2021 Budget	FY 2021 Projected	FY 2022 Budget
Payroll			
Wages and Benefits	\$4,585,814	\$4,191,693	\$4,766,707
Retirement Insurance	270,854	260,792	233,207
Unemployment Compensation	12,000	0	12,000
Workers Compensation	51,597	54,924	59,401
Other Payroll Costs	11,590	18,781	11,590
Total Payroll	\$4,931,855	\$4,488,628	\$5,082,905
Purchased Services			
Rentals and Utilities	\$91,761	\$66,964	\$82,600
Printing and Advertising	70,500	36,625	60,500
Professional/Technical Services	421,500	165,733	438,500
Computer and Computer Services	187,000	145,815	198,500
Communications	152,000	138,636	152,000
Travel	206,000	31,702	179,250
Employee Development	49,500	3,864	58,500
Total Purchased Services	\$1,178,261	\$589,339	\$1,169,850
Supplies and Equipment	\$415,622	\$254,121	\$379,550
Repairs and Maintenance	\$778,270	\$274,837	\$363,270
Indirect Costs			
Statewide Indirect Costs	\$13,615	\$13,614	\$108,298
Attorney General Costs	15,000	2,035	15,000
Total Indirect Costs	\$28,615	\$15,649	\$123,298
Other Operating Costs	\$205,035	\$151,773	\$209,161
Total Operational Costs	\$7,537,658	\$5,774,347	\$7,328,034

Addendum B
IRRRB Meeting Minutes
Friday, April 30, 2021 – 12:00 p.m.
(In accordance with Minnesota Governor Tim Walz's Executive Order 20-01 and due to the COVID-19 pandemic, the meeting was held via ZOOM and live-streamed through YouTube as authorized by Minnesota Statute Section 13D.021)

1) Roll Call

Senator David Tomassoni, chair, called the meeting to order at approximately 12:00 p.m. Laureen Hall took roll call. Present via ZOOM video: Representative Rob Ecklund, Representative Spencer Igo, Representative Dave Lislegard, Representative Dale Lueck, Representative Julie Sandstede, Senator Tom Bakk, Senator Carrie Ruud and Senator Justin Eichorn arrived at 12:11 p.m. during Commissioner comments. Excused: None. Minute Taker: Laureen Hall, Executive Aide. Also present via ZOOM video: Mark Phillips, Commissioner; Matt Sjoberg, Executive Director of Development; Linda Johnson, Director of Mining & Reclamation; Scott Sundvall, Loan Officer; Chris Ismil, Community Development Representative; Jim Plummer, Trails Coordinator; Bob Scuffy, Accounting Director; Janette Godec, Executive Assistant.

2) Approval of the January 15, 2021, Minutes

Representative Julie Sandstede moved approval of the January 15, 2021, meeting minutes. Seconded by Senator Tom Bakk. Motion carried.

Laureen Hall took a roll call vote.

Voting in Favor of the Motion: Representative Rob Ecklund, Representative Spencer Igo, Representative Dave Lislegard, Representative Dale Lueck, Representative Julie Sandstede, Senator Tom Bakk, Senator Carrie Ruud, Senator David Tomassoni

Voting Against the Motion: None

Abstain: None

Excused: Senator Justin Eichorn

4) Cast Corporation – Resolution No. 21-013

Representative Julie Sandstede moved that the Board recommend an expenditure of up to \$131,000 of FY21 DJJ Business Development Project Funds to purchase a participation interest in a bank loan to Cast, as presented in Resolution No. 21-013. Seconded by Senator Carrie Ruud. Motion carried.

Laureen Hall took a roll call vote.

Voting in Favor of the Motion: Representative Rob Ecklund, Representative Spencer Igo, Representative Dave Lislegard, Representative Dale Lueck, Representative Julie Sandstede, Senator Tom Bakk, Senator Justin Eichorn, Senator Carrie Ruud, Senator David Tomassoni

Voting Against the Motion: None

Abstain: None

Excused: None

**IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD
OF THE STATE OF MINNESOTA
DOUGLAS J JOHNSON ECONOMIC PROTECTION TRUST FUND
PURCHASE OF A PARTICIPATION INTEREST IN A LOAN
FOR THE CAST CORPORATION PROJECT**

Resolution No.: 21-013

WHEREAS, the Commissioner is authorized to expend, after consultation with the Iron Range Resources and Rehabilitation Advisory Board ("Board"), the Douglas J. Johnson Economic Protection Trust Fund monies made available under Minnesota Statutes Sections 298.291-298.297 and Minnesota Statute Section 298.28, subdivision 11 ("DJJ Funds"), to provide loans and participate with private sources in providing financing for various projects located within the Taconite Assistance Area ("TAA"), as that term is defined in Minnesota Statutes Section 273.1341, which satisfy the purposes detailed in Minnesota Statutes Section 298.292, subdivision 1; and

WHEREAS, the agency's FY21 Budget includes provision for the use of certain DJJ Funds for economic development projects under a budget line item category for DJJ Business Development Projects ("FY21 DJJ Business Development Project Funds"); and

WHEREAS, the Commissioner has received a proposal for financial assistance from Cast Corporation ("Cast") that, in combination with funds provided from other sources, will finance the purchase of equipment for its machining department that will improve business efficiency (the "Project"), which is more specifically described in the Board packet materials which are attached hereto and incorporated by reference as Exhibit A; and

WHEREAS, the Commissioner has requested the Board to recommend the expenditure of up to \$131,000 of FY21 DJJ Business Development Project Funds to purchase a participation interest in a bank loan to Cast, which is being made as part of a \$262,000 total investment to finance the cost of the Project, with the participation interest to be acquired on the terms and subject to the conditions set forth in Exhibit A and as otherwise discussed at the board meeting; and

WHEREAS, the technical advisory committee, appointed by the Commissioner under the provisions of Minnesota Statutes Section 298.297 to review the terms and conditions of the proposed Project, met on April 22, 2021, and recommended approval of the requested financial assistance for the Project; and

WHEREAS, the Board met via teleconference on April 30, 2021, at 12:00 noon in accordance with Governor Tim Walz's Emergency Executive Order 20-01 Declaring a Peacetime Emergency and Coordinating Minnesota's Strategy to Protect Minnesotans from COVID-19, and the authority for such method of meeting provided under Minnesota Statutes Section 13D.021, to consider, among other matters, Cast's request for financial assistance for the Project and has determined that it would be in the public interest to recommend the expenditure of DJJ Business Development Project Funds for the Project and that the granting of the requested financial assistance would promote economic development in the TAA.

NOW, THEREFORE, IT IS RESOLVED, that the Board hereby recommends the expenditure of up to \$131,000 of FY21 DJJ Business Development Project Funds to purchase a participation interest in a bank loan to Cast to finance a portion of the cost of the Project, with such participation interest to be purchased on the terms and subject to the conditions set forth in Exhibit A and in the agency's standard participation loan forms, including the provisions customarily contained therein that require borrowers to pay at least prevailing wages to workers performing work on construction projects.

PASSED AND ADOPTED BY VOTE OF THE IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD THIS 30TH DAY OF APRIL 2021.

Member	Aye	Nay	Abstain	Excused
Senator Tom Bakk	X			
Senator Justin Eichorn	X			
Senator Carrie Ruud	X			
Senator David Tomassoni	X			
Representative Rob Ecklund	X			
Representative Spencer Igo	X			
Representative Dave Lislegard	X			
Representative Dale Lueck	X			
Representative Julie Sandstede	X			
TOTAL	9	0	0	0

Signed: _____
 Senator David Tomassoni, Chair

**Cast Corporation
 11364 Highway 37
 Hibbing, MN 55746**

Department of Iron Range Resources and Rehabilitation
 Participation Loan

Applicant:	Cast Corporation
Project Location:	11364 Highway 37, Hibbing, MN 55746
Principal(s):	Tim Bungarden 100% S-Corp Owner
Project Description:	Purchase a Brother Compact Machining Center Speedio, Model R650X2 for Cast Corporation's machining department.
Market Opportunity:	This Brothers machine is replacing existing machines to improve efficiency with the latest technology, specifically for small parts. It will help with retaining existing customers and secure additional sales. Cast's

Applicant:	Cast Corporation																														
	machine department completed time studies on 2 of its largest customer jobs (that would run on this new machine) and the improved efficiency is expected to save up to 489 production hours annually. This savings, along with not incurring repair costs on existing machines (\$25,310 in the last 12 months), provided cost justification for the acquisition of the new equipment.																														
Project Investment:	Security State Bank - Equipment Loan - 60 month amortization at a negotiated rate	\$131,000.00																													
	IRRR – Equipment Loan - 60 month amortization.	\$131,000.00																													
	TOTAL	\$262,000.00																													
Jobs:	_1_ Planned New _50_ Retained New job Wages _\$15-\$16/hr_ - \$31,200 - \$33,280 per year plus benefits																														
Collateral:	Equipment purchased with the proceeds from this loan.																														
Business History:	Incorporated in 1995, Cast Corporation, a manufacturing and sales company, was involved in tooling, castings, machining and truncated domes. Cast Corporation sold and continues to sell to a variety of industries including mining, industrial, recreation and automotive. Cast Corporation also offers complete pattern & mold manufacturing services with advanced 3D CAD/CAM technology. In the area of production machining, Cast Corporation offers complete CNC machining capability to complement their tooling and casting sales. They are able to provide partial or finished machined parts from either raw castings or billet.																														
Past Agency History:	<table border="1"> <thead> <tr> <th>Date Originated</th> <th>Initial Balance</th> <th>Current Balance</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>12/17/2012</td> <td>\$358,500.00</td> <td>\$275,880.91</td> <td>Current</td> </tr> <tr> <td>4/3/2013</td> <td>\$31,500.00</td> <td>\$24,369.36</td> <td>Current</td> </tr> <tr> <td>10/7/2014</td> <td>\$945,000.00</td> <td>\$826,711.03</td> <td>Current</td> </tr> <tr> <td>3/31/2015</td> <td>\$500,000.00</td> <td>\$346,187.51</td> <td>Current</td> </tr> <tr> <td>7/2/2019</td> <td>\$305,000.00</td> <td>\$228,141.45</td> <td>Current</td> </tr> <tr> <td>3/24/2020</td> <td>\$125,000.00</td> <td>\$111,370.00</td> <td>Current</td> </tr> </tbody> </table>	Date Originated	Initial Balance	Current Balance	Status	12/17/2012	\$358,500.00	\$275,880.91	Current	4/3/2013	\$31,500.00	\$24,369.36	Current	10/7/2014	\$945,000.00	\$826,711.03	Current	3/31/2015	\$500,000.00	\$346,187.51	Current	7/2/2019	\$305,000.00	\$228,141.45	Current	3/24/2020	\$125,000.00	\$111,370.00	Current		
Date Originated	Initial Balance	Current Balance	Status																												
12/17/2012	\$358,500.00	\$275,880.91	Current																												
4/3/2013	\$31,500.00	\$24,369.36	Current																												
10/7/2014	\$945,000.00	\$826,711.03	Current																												
3/31/2015	\$500,000.00	\$346,187.51	Current																												
7/2/2019	\$305,000.00	\$228,141.45	Current																												
3/24/2020	\$125,000.00	\$111,370.00	Current																												
Contingencies:	None																														
Technical Advisory Committee Recommendation:	The TAC recommended approval at its April 22, 2021 meeting.																														

Applicant:	Cast Corporation
Funding Authorization:	Douglas J. Johnson Economic Protection Trust Fund: This project is authorized under the provision of the Douglas J Johnson Economic Protection Trust Fund Act (Minnesota Statutes sections 298.291 – 298.298) pertaining to expenditures of Douglas J Johnson Economic Protection Trust Fund monies for economic development projects in that these statutes authorize small business development loans to private enterprises for the purpose of job creation and economic development within the Taconite Assistance Area defined in Minnesota Statutes Section 273.1341.

5) Airmark Inc. dba Nelson Wood Shims – Resolution No. 21-014

Senator Justin Eichorn moved that the Board recommend an expenditure of up to \$500,000 of FY21 DJJ Business Development Project Funds to purchase a participation interest in a bank loan to Airmark Inc. dba Nelson Wood Shims, as presented in Resolution No. 21-014. Seconded by Representative Spencer Igo. Motion carried.

Laureen Hall took a roll call vote.

Voting in Favor of the Motion: Representative Rob Ecklund, Representative Spencer Igo, Representative Dave Lislegard, Representative Dale Lueck, Representative Julie Sandstede, Senator Tom Bakk, Senator Justin Eichorn, Senator Carrie Ruud, Senator David Tomassoni

Voting Against the Motion: None

Abstain: None

Excused: None

**IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD
OF THE STATE OF MINNESOTA
DOUGLAS J JOHNSON ECONOMIC PROTECTION TRUST FUND
PURCHASE OF A PARTICIPATION INTEREST IN A LOAN
FOR AIRMARK INC., DBA NELSON WOOD SHIMS PROJECT**

Resolution No.: 21-014

WHEREAS, the Commissioner is authorized to expend, after consultation with the Iron Range Resources and Rehabilitation Advisory Board (“Board”), the Douglas J. Johnson Economic Protection Trust Fund monies made available under Minnesota Statutes Sections 298.291-298.297 and Minnesota Statute Section 298.28, subdivision 11 (“DJJ Funds”), to provide loans and participate with private sources in providing financing for various projects located within the Taconite Assistance Area (“TAA”), as that term is defined in Minnesota Statutes Section 273.1341, which satisfy the purposes detailed in Minnesota Statutes Section 298.292, subdivision 1; and

WHEREAS, the agency's FY21 Budget includes provision for the use of certain DJJ Funds for economic development projects under a budget line item category for DJJ Business Development Projects ("FY21 DJJ Business Development Project Funds"); and

WHEREAS, the Commissioner has received a proposal for financial assistance from Airmark Inc., DBA Nelson Wood Shims ("NWS") that, in combination with funds provided from other sources, will finance the purchase of equipment that will substantially increase NWS's production capacity (the "Project"), which is more specifically described in the Board packet materials which are attached hereto and incorporated by reference as Exhibit A; and

WHEREAS, the Commissioner has requested the Board to recommend the expenditure of up to \$500,000 of FY21 DJJ Business Development Project Funds to purchase a participation interest in a bank loan to NWS, which is being made as part of a \$1.3 million total investment to finance the cost of the Project, with the participation interest to be acquired on the terms and subject to the conditions set forth in Exhibit A and as otherwise discussed at the board meeting; and

WHEREAS, the technical advisory committee, appointed by the Commissioner under the provisions of Minnesota Statutes Section 298.297 to review the terms and conditions of the proposed Project, met on April 22, 2021, and recommended approval of the requested financial assistance for the Project; and

WHEREAS, the Board met via teleconference on April 30, 2021, at 12:00 noon in accordance with Governor Tim Walz's Emergency Executive Order 20-01 Declaring a Peacetime Emergency and Coordinating Minnesota's Strategy to Protect Minnesotans from COVID-19, and the authority for such method of meeting provided under Minnesota Statutes Section 13D.021, to consider, among other matters, NWS's request for financial assistance for the Project and has determined that it would be in the public interest to recommend the expenditure of DJJ Business Development Project Funds for the Project and that the granting of the requested financial assistance would promote economic development in the TAA.

NOW, THEREFORE, IT IS RESOLVED, that the Board hereby recommends the expenditure of up to \$500,000 of FY21 DJJ Business Development Project Funds to purchase a participation interest in a bank loan to NWS to finance a portion of the cost of the Project, with such participation interest to be purchased on the terms and subject to the conditions set forth in Exhibit A and in the agency's standard participation loan forms, including the provisions customarily contained therein that require borrowers to pay at least prevailing wages to workers performing work on construction projects.

PASSED AND ADOPTED BY VOTE OF THE IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD THIS 30TH DAY OF APRIL 2021.

Member	Aye	Nay	Abstain	Excused
Senator Tom Bakk	X			
Senator Justin Eichorn	X			
Senator Carrie Ruud	X			
Senator David Tomassoni	X			
Representative Rob Ecklund	X			
Representative Spencer Igo	X			
Representative Dave Lislegard	X			

Representative Dale Lueck	X			
Representative Julie Sandstede	X			
TOTAL	9	0	0	0

Signed: _____
 Senator David Tomassoni, Chair

Airmark Inc., DBA Nelson Wood Shims
500 Northwest 3rd Street
Cohasset, MN 55721

Department of Iron Range Resources and Rehabilitation
 Bank Participation Loan

Applicant:	Airmark Inc., dba Nelson Wood Shims		
Project Location:	500 NW 3rd St , PO Box 395, Cohasset, MN 55721		
Principal(s):	Brian Peterson, Chuck Scherer, Ryan Still		
Project Description:	Purchase of a Wood-Mizer Titan sawmill and supporting equipment which will increase capacity up to four times of the current production.		
Market Opportunity:	During 2020 and the COVID pandemic, Nelson Wood Shims (NWS) had been fortunate to add a number of new customers – as well as grow their business with current customers. If they do nothing more than maintain the current sales volumes for 2020, they will likely consider 2021 a success. As such, the primary objectives for 2021-2022 are to upgrade equipment and infrastructure, as well as hire new employees to maintain the current sales volumes and create production capacity. Anything beyond this would be considered a bonus.		
Project Investment:	Equipment - IRRR – 7-year amortization		\$500,000.00
	Equipment – Bankers Trust – 7-year amortization		\$500,000.00
	Equity/Cash		\$300,000.00
	TOTAL		\$1,300,000.00
Jobs:	12 Planned New 53 Retained Wages _\$17 to \$38/hr per year plus benefits		
Collateral:	Equipment purchased from the proceeds of the prospective loan.		
Business History:	Effective 10/31/2019, Nelson Wood Shims officially became a 100% ESOP when Fred Bills sold all of his stock to the Trustee of Airmark, Inc. Employee Stock Ownership Plan and Trust. As a result of this		

Applicant:	Airmark Inc., dba Nelson Wood Shims				
	<p>transaction, all employees are now partial owners of NWS.</p> <p>NWS was founded in 1960 and has grown from a one-person operation to the largest shim manufacturer in North America. The company's high-volume facility produces quality products for distribution nationwide at globally competitive pricing.</p> <p>Product sales today are primarily in the USA and Canada; however, some distributors such as Home Depot, Lowes, and Ace Hardware carry NWS products into Mexico, Australia, and other countries.</p>				
Past Agency History:	Original Amount	Origin Date	Maturity Date	Current balance	Loan status
	\$225,000	1/23/2015	2/1/2020	\$0	PIF
	\$305,550	8/13/2013	9/30/2018	\$0	PIF
	\$250,000	2/24/2011	1/26/2016	\$0	PIF
	\$362,765	12/18/2015	7/1/2019	\$0	PIF
	\$260,000	11/10/2016	12/31/2021	\$35,383	CUR
	\$325,000	2/28/2018	3/1/2025	\$188,548	CUR
	\$165,000	1/18/2019	12/24/2023	\$94,514	CUR
Contingencies:	None				
Technical Advisory Committee Recommendation:	The TAC recommended approval at its April 22, 2021 meeting.				
Funding Authorization:	<p>Douglas J. Johnson Economic Protection Trust Fund: This project is authorized under the provision of the Douglas J Johnson Economic Protection Trust Fund Act (Minnesota Statutes sections 298.291 – 298.297) pertaining to expenditures of Douglas J Johnson Economic Protection Trust Fund monies for economic development projects in that these statutes authorize small business development loans to private enterprises for the purpose of job creation and economic development within the Taconite Assistance Area defined in Minnesota Statutes Section 273.1341.</p>				

6) FY21 Development & Community Infrastructure Projects – Resolution No. 21-015

Representative Dave Lislegard moved that the Board recommend an expenditure of up to \$2,351,769 for 13 community and development infrastructure projects. \$1,005,099 for the Proposed Projects would be expended from TEPF Public Works fund, \$1,236,045 from DJJ Public Works Funds, and

\$110,625 from Highway 1 Corridor Account Funds as, as described in Exhibit A of Resolution No. 21-015. Seconded by Representative Dale Lueck. Motion carried.

Laureen Hall took a roll call vote.

Voting in Favor of the Motion: Representative Rob Ecklund, Representative Spencer Igo, Representative Dave Lislegard, Representative Dale Lueck, Representative Julie Sandstede, Senator Tom Bakk, Senator Justin Eichorn, Senator Carrie Ruud, Senator David Tomassoni

Voting Against the Motion: None

Abstain: None

Excused: None

**IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD
OF THE STATE OF MINNESOTA
FY21 PUBLIC WORKS PROJECT RECOMMENDATIONS**

Resolution No.: 21-015

WHEREAS, pursuant to the agency's approved fiscal year 2021 ("FY21") Budget, the Commissioner is authorized to expend up to \$5,500,000 for development and community infrastructure projects from the line item for Public Works funded through the Taconite Area Environmental Protection Fund as authorized by Minnesota Statutes Section 298.223 ("**Public Works-TEPF Funds**"), of which \$4,314,048 has already been obligated for projects by prior Board actions, leaving \$1,185,952 that has not yet been approved by the Board for expenditure during FY21; and

WHEREAS, pursuant to the agency's approved fiscal year 2021 ("FY21") Budget, the Commissioner is authorized to expend up to \$2,000,000 for development infrastructure, community infrastructure and broadband projects from the corpus of the Douglas J. Johnson Economic Protection Trust Fund as authorized by Minnesota Statutes Sections 298.292, subdivision 1, and 298.296, subdivision 2(d) ("**Public Works-DJJ Corpus Trust Funds**"), of which \$750,000 has already been obligated for projects by prior Board actions, leaving \$1,250,000 that has not yet been approved by the Board for expenditure during FY21; and

WHEREAS, the Commissioner is further authorized to expend, after consultation with the Iron Range Resources and Rehabilitation Advisory Board, special fund Highway 1 Corridor Account monies made available under 2017 Laws of Minnesota, 1st Special Session, Chapter 1, Article 11, Section 18 ("**Highway 1 Corridor Account Funds**") for economic development projects in the cities of Babbitt, Cook, Ely or Tower; and

WHEREAS, the Commissioner has received proposals for the expenditure of up to \$2,351,769 for 13 community and development infrastructure projects, which are more fully described in Exhibit A, which is attached hereto and incorporated by reference (collectively the "**Proposed Projects**"); and

WHEREAS, \$1,005,099 for the Proposed Projects would be expended from TEPF Public Works Funds, \$1,236,045 for the Proposed Projects would be expended from DJJ Public Works Funds, and \$110,625 for the Proposed Projects would be expended from Highway 1 Corridor Account Funds, as fully detailed in Exhibit A; and

WHEREAS, the Board met in open session via electronic means on April 30, 2021, at 12:00 noon in accordance with Governor Tim Walz's Emergency Executive Order 20-01 Declaring a Peacetime Emergency and Coordinating Minnesota's Strategy to Protect Minnesotans from COVID-19, and the authority for such method of meeting provided under Minnesota Statutes Section 13D.021 to consider, among other matters, the Proposed Projects and has determined that the expenditure of Public Works-TEPF Funds, Public Works-DJJ Corpus Trust Funds and Highway 1 Corridor Account Funds for the purposes and in the amounts specified in Exhibit A would be in the public interest and promote economic development within the TAA.

NOW, THEREFORE, IT IS RESOLVED, that the Board hereby recommends the expenditure of up to \$1,005,099 of FY21 Public Works-TEPF Funds, \$1,236,045 of FY21 Public Works-DJJ Corpus Trust Funds and \$110,625 of Highway 1 Corridor Account Funds to provide grants for the Proposed Projects in the amounts and for the purposes set forth in Exhibit A.

BE IT FURTHER RESOLVED that the Board's recommendation for the expenditure of all funds for all of the Proposed Projects, including those Proposed Projects which have associated private development work, is contingent upon the agency, in its grant contracts, requiring each such grantee entity to commit to the payment of prevailing wages for the funded project as required by law, or to the extent required in the Board's Resolution 96-005.

BE IT FURTHER RESOLVED that the Board's recommendation for the expenditure of all funds for the Proposed Projects is further contingent upon all such project financing being in place before the agency's funds are released.

PASSED AND ADOPTED BY VOTE OF THE IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD THIS 30TH DAY OF APRIL 2021.

Member	Aye	Nay	Abstain	Excused
Senator Tom Bakk	X			
Senator Justin Eichorn	X			
Senator Carrie Ruud	X			
Senator David Tomassoni	X			
Representative Rob Ecklund	X			
Representative Spencer Igo	X			
Representative Dave Lislegard	X			
Representative Dale Lueck	X			
Representative Julie Sandstede	X			
TOTAL	9	0	0	0

Signed: _____
Senator David Tomassoni, Chair

COMMUNITY INFRASTRUCTURE

City of Aitkin

Grant Amount: \$225,000

The project consists of water, sewer and storm sewer upgrades on several streets in the city of Aitkin. The improvements benefit the City by providing access to safe drinking water for all residents and an opportunity to seal existing water wells within the city Drinking Water Supply Management Area (DWSMA) that can provide a direct pollutant conduit to the City's drinking water supply. In addition, the improvements will improve sanitary sewer collection, water supply, and storm water management in the downtown commercial area, while also addressing deficient sidewalk and building access issues. The improvements will allow the downtown commercial areas to provide better access and opportunities for sidewalk commerce related activity. The project is expected to create eight construction jobs.

USES		SOURCES	
Construction	\$1,131,773	Iron Range Resources & Rehabilitation	\$225,000
Contingency	99,600	City	1,175,823
A&E	169,450		
TOTAL	\$1,400,823	TOTAL	\$1,400,823

City of Aurora

Grant Amount: \$130,000

The project consists of phase II emergency waste treatment facility upgrades. The system failed in November 2018 when the primary digester experienced over-pressurization, and the cover was lifted from the structure causing structural damage to the cover and tank. The improvements at that time included repairs to the tank cover and walls, and modifications to the existing piping and gas handling systems to allow safe operation of the anaerobic digestion system. The over-pressurization damage was in part caused when a build-up of rags (an industry term for any item which goes through the WWTF which is not biosolids or liquids such as wipes, diapers, clothing, etc.) caused a failure in the primary digester. The phase II project will consist of improvements to the screening system, which aims to address the problem of influent rags. The project is expected to create four construction jobs.

USES		SOURCES	
Construction	\$430,000	Iron Range Resources & Rehabilitation	\$130,000
Contingency	80,000	City	430,000
A&E	150,000	CDBG	100,000
TOTAL	\$660,000	TOTAL	\$660,000

Finland Fire and Rescue

Grant Amount: \$40,650

The project consists of the construction of a new facility to store equipment, loose fire goods, and fire retardants and oils. These chemicals need their own facility storage space as mandated by OSHA. The project also includes new water storage tanks with 4,800 gallons of capacity for fire protection services. Existing facility upgrades will also be made to include ADA and OSHA compliant bathrooms. The Finland

Fire and Rescue Department provides emergency services to residents of Crystal Bay Township, Stony River Township, Beaver Bay Township and unorganized territory that includes a 60-square-mile area with 350 structures. Businesses include the Wolf Ridge Environmental Center, Finland Coop, Mobile Gas Station, Lake County Garage, State DNR Offices, US Forest Service, Maxwell's Green House, Hoff's Construction and Finland Lutheran Church. The project is expected to create one construction job.

USES		SOURCES	
Facility construction	52,719	Iron Range Resources & Rehabilitation	\$40,650
Water storage tanks	18,060	Finland Fire and Rescue	40,727
Facility upgrades	10,598		
TOTAL	\$81,377	TOTAL	\$81,377

City of Gilbert

Grant Amount: \$120,000

The project consists of making emergency improvements to the Gilbert Water Treatment Plant (WTP). The City's existing water system infrastructure includes three groundwater wells, three storage tanks, one water treatment plant, one booster station and a distribution pipe network. The city's water system was put online in 1915. Since then, the WTP has been expanded twice, and a sludge processing facility was added. The condition of the existing facility is poor, and the WTP is in need of immediate emergency repairs to protect the city's water supply. Improvements to the facility include piping and valve modifications, filter repair, clarifier repair, upgrades to the sulfuric acid carrier water system, and control systems improvements. The completion of these repairs will ensure that the facility will meet OSHA regulations and AWWA standards. The project is expected to create two construction jobs.

USES		SOURCES	
Facility upgrades	280,549	Iron Range Resources & Rehabilitation	\$120,000
Contingency	16,000	City	223,711
A&E	47,162		
TOTAL	\$343,711	TOTAL	\$343,711

City of Tower

Grant Amount: \$100,000

This phase of the project includes the repair and rehabilitation of the exterior masonry of the Tower Historic Fire Hall. The project improves the quality and appearance of the building as a historic resource, enhances the building's functionality and returns it to active public use. The overall project is the preservation of the Historic Fire Hall on Tower's Main Street. Located in the heart of downtown Tower, the Historic Fire Hall is a pivotal resource in the development story of the Tower-Soudan-Lake Vermilion community. The building connects the community and region to the start of the iron ore mining industry which has shaped the region and the state's industrial and cultural identity. The project is expected to create three construction jobs.

USES		SOURCES	
Construction	\$399,981	Iron Range Resources & Rehabilitation	\$100,000
Contingency	32,798	MNHS	330,229
A&E	89,550	IRRR	37,000
		Tower-Soudan Historical Society	55,100
TOTAL	\$522,329	TOTAL	\$522,329

City of Virginia

Grant Amount: \$250,000

The project consists of phase I city-wide street reconstruction and infrastructure replacement of storm sewer, sidewalks and water and sewer service lines. In November 2019 the city updated its capital improvement plan (CIP) to evaluate city-wide infrastructure and to identify short- and long-term capital improvement projects. The city's CIP identified over \$10 million in city-wide water, sewer and street improvements. The project is expected to create 39 construction jobs.

USES		SOURCES	
Construction	\$4,888,003	Iron Range Resources & Rehabilitation	\$250,000
Contingency	465,523	City	4,623,431
A&E	581,905	State aid	1,062,000
TOTAL	\$5,935,431	TOTAL	\$5,935,431

DEVELOPMENT INFRASTRUCTURE

City of Crosby

Grant Amount: \$350,000

The project consists of the extension of utilities including water, sewer, storm sewer and lift station construction to allow for new business development in Crosby. The city is working with Miner's Incorporated on the construction of a new 64,000 square-foot grocery and liquor store with a full pharmacy. The development project will provide significant tax base increase for Crosby and essential services to the region. The project is expected to create 61 permanent jobs and 57 construction jobs.

USES		SOURCES	
Infrastructure and road reconstruction	\$644,774	Iron Range Resources & Rehabilitation	\$350,000
Contingency	64,477	Private	8,359,251
A&E	100,000		
Building construction	7,900,000		
TOTAL	\$8,709,251	TOTAL	\$8,709,251

City of Ely

Grant Amount: \$277,270

The project consists of infrastructure and site work for the re-development of the former Shopko building in Ely. The city is currently working with Zup's on the reconstruction and addition of a new 34,470 square-foot grocery and liquor store with a full pharmacy and meat processing center. The development project

will provide significant tax base increase for Ely and essential services to the region. The project is expected to create 49 permanent and 44 construction jobs.

USES		SOURCES	
Infrastructure and site work	\$277,270	Iron Range Resources & Rehabilitation	\$277,270
Facility reconstruction	1,954,479	Private	6,557,025
Addition construction	200,517	AEOA	20,000
Equipment	1,631,029	Highway 1 Corridor	110,625
Demolition	128,900	Iron Range Resources & Rehabilitation - demolition	128,900
Land acquisition	2,720,000		
Other infrastructure	110,625		
A&E	71,000		
TOTAL	\$7,093,820	TOTAL	\$7,093,820

City of Ely

Grant Amount: \$73,449

The project consists of watermain replacement. The Ely Boathouse Brewpub is working on an expansion that requires the installation of a sprinkler system. The expansion will add additional jobs and increase the business's taxable value. To allow for the expansion the watermain serving the facility needs to be increased to provide adequate capacity. The project is expected to create five permanent and three construction jobs.

USES		SOURCES	
Waterline replacement	\$73,449	Iron Range Resources & Rehabilitation	\$73,449
Building reconstruction	431,551	Private	476,551
A&E	20,000		
Contingency	25,000		
TOTAL	\$550,000	TOTAL	\$550,000

City of Eveleth

Grant Amount: \$66,000

The project consists of ADA compliant facility upgrades for the East Range Development Achievement Center (ERDAC) construction project located at 800 A Avenue in Eveleth. The construction project entails replacement of an existing accessible entrance ramp, pavement upgrades and ADA facility improvements. ERDAC provides job training and work opportunities for over 90 employees with disabilities from the Iron Range including the communities of Virginia, Eveleth, Mountain Iron, Gilbert, Biwabik, Aurora, Hoyt Lakes, Babbitt, Embarrass, Hibbing, Chisholm, Buhl, and surrounding areas. Training and production are done at ERDAC and in community settings. The project is expected to create two construction jobs.

USES		SOURCES	
ADA ramp and exterior site improvements	66,000	Iron Range Resources & Rehabilitation	\$66,000
Facility upgrades	147,683	EEDA	12,000
		CDBG	75,000
		ERDAC	54,017
		AEOA	6,666
TOTAL	\$213,683	TOTAL	\$213,683

City of Gilbert

Grant Amount: \$33,775

The project consists of infrastructure extension to serve a business in the city of Gilbert. The West 40 RV Campground is updating and expanding the campground footprint. A new 'D' 75-foot by 40-foot section of seven campsites which will serve large RVs and trailers, complete with 50amp electric, city water and city sewer service. A new walk-in group tent site will also be added which would include 20amp electric service. A dedicated electric vehicle (EV) charging station will be added in the overflow and restroom/shower building parking area. The park owners will also construct a new shower and restroom facility and perform interior demolition and re-purposing of the existing restrooms and showers in the current office building. The renovations will result in a campground store with RV parts, supplies and retail items frequently requested by guests as well as equipment rentals. The project is expected to create one construction job.

USES		SOURCES	
Infrastructure extension	\$33,775	Iron Range Resources & Rehabilitation	\$33,775
Construction	82,500	Private	106,500
A&E	12,000		
Contingency	12,000		
TOTAL	\$140,275	TOTAL	\$140,275

City of Hibbing

Grant Amount: \$300,000

The project consists of infrastructure and site work for a business expansion in the city of Hibbing. Eye Clinic North is currently providing services in a 1,000 square-foot space in downtown Hibbing. They will construct a new 5,500 square-foot eye clinic facility. The new facility will expand services from the current two exam rooms to eight exam rooms, and additional support spaces and a large optical suite. The expansion will add additional employees including one optometrist and two full-time support staff. Future growth could include additional providers, support staff and an independent ophthalmologist. The new facility will provide tax base increase for Hibbing and provide essential services to the region. The project is expected to create six permanent and 16 construction jobs.

USES		SOURCES	
Infrastructure and site work	\$336,880	Iron Range Resources & Rehabilitation	\$300,000
Building construction	1,413,992	Private	1,830,759
Equipment	382,349	HEDA loan	250,000
Land acquisition	150,000		
Contingency	32,538		
A&E	65,000		
TOTAL	\$2,380,759	TOTAL	\$2,380,759

City of Two Harbors

Grant Amount: \$275,000

The project consists of infrastructure and construction of a service road for a business expansion in Two Harbors. Lake Superior Dental Associates (LSDA) will construct a new 4,500 square-foot dental clinic. The expansion into a new clinic will accommodate space for additional staff and dental services. LSDA will expand care to the community from three days a week to four or five days a week. The new facility will increase tax base for Two Harbors and provide essential services to the region. The project is expected to create five permanent and 10 construction jobs.

USES		SOURCES	
Infrastructure and site work	\$303,318	Iron Range Resources & Rehabilitation	\$275,000
Facility construction	864,000	Private	1,205,018
Equipment	240,000	City	30,000
Contingency	30,300		
A&E	72,400		
TOTAL	\$1,510,018	TOTAL	\$1,510,018

7) FY21 Regional Trails Projects – Resolution No. 21-016

Senator Tom Bakk moved that the Board recommend an expenditure of up to \$959,300 of FY21 Regional Trail Program funds for five regional trails projects, as described in Exhibit A of Resolution No. 21-016. Seconded by Representative Rob Ecklund. Motion carried.

Laureen Hall took a roll call vote.

Voting in Favor of the Motion: Representative Rob Ecklund, Representative Spencer Igo, Representative Dave Lislegard, Representative Dale Lueck, Representative Julie Sandstede, Senator Tom Bakk, Senator Justin Eichorn, Senator Carrie Ruud, Senator David Tomassoni

Voting Against the Motion: None

Abstain: None

Excused: None

**IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD
OF THE STATE OF MINNESOTA
DOUGLAS J. JOHNSON ECONOMIC PROTECTION TRUST FUND
FY21 REGIONAL TRAILS PROJECT RECOMMENDATIONS**

Resolution No.: 21-016

WHEREAS, pursuant to the agency's approved fiscal year 2021 ("FY21") Budget, the Commissioner is authorized to expend up to \$2,000,000 for regional trails projects from the corpus of the Douglas J. Johnson Economic Protection Trust Fund as authorized by Minnesota Statutes Sections 298.292, subdivision 1, and 298.296, subdivision 2(c) ("**Regional Trails Program Funds**"); and

WHEREAS, \$1,040,700 has already been obligated for regional trails projects by prior Board actions, leaving \$959,300 of Regional Trails Program Funds that have not yet been recommended by the Board for expenditure in FY21; and

WHEREAS, the Commissioner has received proposals for the expenditure of up to \$959,300 for five regional trails projects, which are more fully described in Exhibit A, which is attached hereto and incorporated by reference (collectively the "**Proposed Projects**"); and

WHEREAS, the Board met in open session via electronic means on April 30, 2021, at 12:00 noon in accordance with Governor Tim Walz's Emergency Executive Order 20-01 Declaring a Peacetime Emergency and Coordinating Minnesota's Strategy to Protect Minnesotans from COVID-19, and the authority for such method of meeting provided under Minnesota Statutes Section 13D.021, to consider, among other matters, the Proposed Projects and has determined that the expenditure of Regional Trails Program Funds for the purposes and in the amounts specified would be in the public interest and promote economic development within the TAA.

NOW, THEREFORE, IT IS RESOLVED, that the Board hereby recommends the expenditure of up to \$959,300 of FY21 Regional Trails Program Funds to provide grants for the Proposed Projects in the amounts and for the purposes set forth in Exhibit A.

BE IT FURTHER RESOLVED that the Board's recommendation for the expenditure of all funds for the Proposed Projects, including those Proposed Projects which have associated private development work, is contingent upon the agency, in its grant contracts, requiring each such grantee entity to commit to the payment of prevailing wages for the funded project as required by law, or to the extent required in the Board's Resolution 96-005.

BE IT FURTHER RESOLVED that the Board's recommendation for the expenditure of all funds for the Proposed Projects is further contingent upon all such project financing being in place before the agency's funds are released.

PASSED AND ADOPTED BY VOTE OF THE IRON RANGE RESOURCES AND REHABILITATION ADVISORY BOARD THIS 30TH DAY OF APRIL 2021.

Member	Aye	Nay	Abstain	Excused
Senator Tom Bakk	X			
Senator Justin Eichorn	X			
Senator Carrie Ruud	X			
Senator David Tomassoni	X			
Representative Rob Ecklund	X			
Representative Spencer Igo	X			
Representative Dave Lislegard	X			
Representative Dale Lueck	X			
Representative Julie Sandstede	X			
TOTAL	9	0	0	0

Signed: _____
 Senator David Tomassoni, Chair

REGIONAL TRAILS PROJECTS

Lake County

Grant Amount: \$450,000

Phase one of the Split Rock Wilds Mountain Bike Park was completed in 2020 and consisted of the construction of 12 miles of mountain bike trails between the new MnDNR Shipwreck Creek Campground and the Cove Point Lodge property in Beaver Bay. This trail is a rocky and technical trail and was built for experienced riders. Currently proposed is Phase Two for construction in 2021, and consists of plans to build a less technical trail from Split Rock to Cove Point, construct a bridge across Shipwreck Creek, rock armor clay trails that were built in 2020, and build an intermediate level jump trail. This phase will add an additional 11 miles to the Split Rock Wilds Trail System, and is designed for riders looking for a more intermediate and beginner trail experience. Both existing and proposed trails run along a ridge overlooking Lake Superior. The area is remote with no roads and limited access giving it a unique experience compared to other area trails. The project goal is to provide trails for a multitude of skill levels.

USES		SOURCES	
Rock armor clay trails, Build bridge, Build trails	\$900,000	Iron Range Resources & Rehabilitation	\$450,000
		Greater MN Parks and Trails Commission	\$450,000
TOTAL	\$900,000	TOTAL	\$900,000

City of Ely**Grant Amount: \$300,000**

This funding request is to match the remaining funds available in the ATV Dedicated Account for Phase 1 construction on the Prospectors Loop Trail. This funding will allow for the completion of an important connection between the Vermilion Lake State Park and the main Prospectors Trail running between Tower and Babbitt. All permits are in place, a bridge has been acquired, and the trail needs to be completed and bridge set. Current balance of funds is not adequate to finish this segment, and the IRRR trail grant match is necessary to complete the project before the ATV Dedicated Account funds expire on June 30, 2021.

USES		SOURCES	
Trail Construction	\$600,000	Iron Range Resources & Rehabilitation	\$300,000
		ATV Dedicated Account	\$300,000
TOTAL	\$600,000	TOTAL	\$600,000

St. Louis County Public Works**Grant Amount: \$154,300**

St. Louis County is making this grant request on behalf of Voyageur Country ATV for construction of their multi-faceted trail improvement project. This project consists improvements in various locations of the trail system and a number of segments of the system including Crane Lake to Vermilion Falls, Arrowhead Trail north of County Highway 23 east of Myrtle Lake, USFS 601 Verma-Grade which serves the Bridge Trail, the Winchester Lake Overlook and the Fire Tower Loop at Shively Road. Improvements entail trail hardening, additional gravel, signage, culverts, rip rap, entrance gates, overlook structures, clearing and grubbing, subgrade preparation and wetland crossings. Trail improvements require a variety of activities including construction, design, wetland credits, permits, environmental review, easements acquisition and construction administration.

USES		SOURCES	
Construction, Design, Permitting, Environmental, Wetlands	\$308,600	Iron Range Resources & Rehabilitation	\$154,300
		State Bonding Funds	\$154,300
TOTAL	\$308,600	TOTAL	\$308,600

Iron Range Tourism Bureau**Grant Amount: \$50,000**

This grant will fund the Northern St. Louis County Trails Task Force Sustainable Trails Grant Program. This grant will help sustain a fund for trail projects where needs cannot be met with other grants, donations of time and equipment, and other cash contributions alone. The fund is administered by a committee of St Louis County Trails Task Force members. Grants cannot exceed \$10,000, and requires a 1:1 match. The emphasis on funding would be for projects that cannot otherwise be completed, and those that fall within the goals and priorities outlined by the Northern St Louis County/Koochiching County Comprehensive Trails Plan. The first \$50,000 round of funding for the program assisted in backing 13 trail sustainability projects over the last year.

USES		SOURCES	
Various trail projects	\$100,000	Iron Range Resources & Rehabilitation	\$50,000
		Trail Builders	\$50,000
TOTAL	\$100,000	TOTAL	\$100,000

City of Tower

Grant Amount: \$5,000

The grant will assist in funding the City of Tower Trails Plan Project. The City's Comprehensive Plan includes goals for the cities of Tower and Breitung to improve connectivity between significant areas and destinations, as well as to explore future trail expansion and connectivity within Tower and Breitung and throughout the region. The trail plan will outline conceptual trail connections and considers trails for people walking, hiking and biking, and any other type of trail identified in the planning process. Planning will be community-based and involve a Steering Committee. The deliverable will be a Plan document with project information and conceptual trail connections.

USES		SOURCES	
Professional Services -Facilitate Planning Process	\$10,000	Iron Range Resources & Rehabilitation	\$5,000
		Tower Economic Development Authority	\$2,500
		Applicant	\$2,500
TOTAL	\$10,000	TOTAL	\$10,000

8) Adjournment

The meeting adjourned at 12:46 p.m.