ascent
INNOVATION

October 11, 2019

Nathan Lukkes
General Council, SD Board of Regents
306 East Capitol Ave.; Suite 200
Pierre, SD 57501

Mr. Lukkes:

Ascent Innovation has been operating on the South Dakota School of Mines & Technology campus since 2006 and due to its success, the Rapid City Mayor donated land in late 2017 to launch a second facility. The community has provided a large investment into the infrastructure for new construction that will connect the South Dakota School of Mines & Technology and the growing downtown area of Rapid City's Innovation District, focusing on SDSMT program specialties.

Ascent Innovation is extremely grateful to the South Dakota Board of Regents for this year's inclusion of the ongoing investment to support state-wide research efforts.

Details of Ascent's first-time $100,00 cash match since July 1, 2019

- Increased Client Manager's responsibilities and salary *$12,000.*
  Showcasing SDSMT research success and opportunities by instituting Client Spotlight, Base Camp Workshops, Rise of Innovation Podcast
- Nanopareil New Research Facility in Ascent Innovation *$50,000*
  Born from the SD School of Mines & Technology, Nanopareil is staged to change the landscape of filtration technology. In order to commercialize, funding from the City of Rapid City, Ascent Innovation, and this grant were combined to build a state-of-the-art wet lab complete with industrial ventilation hoods. This lab will be a long-lasting facility for use for future projects and SDSM&T research. Total cost for this remodel was $192,000.

605.716.0003
525 University Loop #100 Rapid City, SD 57701
ASCENT-INNOVATION.COM

- LSI study in conjunction with Elevate Rapid City *$33,000*

  Ascent Innovation's involvement with this study is to assist the engagement of SDSMT and the new Air Force B21 contractors to capitalize on growing a military contractor innovation hub.

  LSI is a national leader in strategic basing and sustainment planning, analysis and activation consulting. LSI is gathering intel on the full ecosystem support requirements associated with industry supply chain, workforce needs, etc. of the mission of the Air Force's new B-21 mission that will be at Ellsworth AFB. Ascent Innovation and SDSMT will benefit by this feasibility project as it equates to potential new company startups and current company expansion that focuses on research at SDSMT. Many of those companies could find a technology home in the current Ascent Innovation Center or the new Ascent Innovation Campus. Total study with action items cost is $130,000.

Recent Activities

- Groundbreaking was held October 9, 2019 for a ten-million-dollar, forty thousand square foot facility to be completed December 2020. Emerging opportunities at the South Dakota School of Mines & Technology and within the region are significant factors in the feasibility of this new innovation center. Such opportunities include:

  A new emphasis on a culture of entrepreneurship, commercialization and technology transfer at SDSMT.

  A developing linkage between SDSMT and economic entities in the area centering around the importance of a commercialization strategy for regional economic development.

  Developing centers of excellence at SDSMT driven by federal partnerships/research grants in STEM fields.
- NSIN Coordinated meeting; NSIN creates new communities of innovators to solve national security problems. It is a DOD program office under the Under Secretary of Defense (R&E) that partners with research universities and the venture community to bring innovative tools and solutions to warfighters.

  Ascent Innovation, the SD Ellsworth Development Authority and SDSMT coordinated a meeting with NISC and the following Rapid City Based Defense Contractors:

  - VRC Metals Systems,Dr. Christian Widener, Chief Technology Officer
  - Innovative Materials & Processes, Matt Puszynski, Vice President
  - NanoCoatings, Dr. Frank Kustas, Founder
  - Applied Research Associates, Ericka Amborn, Senior Engineer
  - Black Hills Info Security, Jordan Drysdale, Security Analyst
- Planning has begun for a Defense Pitch Day that will be held in Rapid City in conjunction with NSIN. *(Three Giant Vision Business Plan Competition winners are located in Ascent Innovation).*

Capital investment and partners

The private capitalization of current companies over the past 9 years have grown from an initial investment of $5.6 million to exceeding $39 million.

Partners include City of Rapid City, Governor's Office of Economic Development, U.S. Department of Commerce Economic Development Administration and Elevate Rapid City.

List of tenants (attached)

Upcoming capital projects within the Ascent Innovation Campus

Completion of Nanopareil wet lab

Recent success stories

VRC Metal Systems graduated from Ascent Innovation in July 2019 and moved into a 60,000 sq ft space just 10 miles from the incubator outside the east gate of Ellsworth Air Force Base. VRC is a world-leader in cold spray technology - cold spray, also referred to as supersonic particle deposition, is a high-energy solid-state coating and powder consolidation process. Two specific components identified for such a need were equipment access panels and hydraulic lines on the B-1 bomber. Starting with just 2 co-founders, VRC has grown to more than 60 employees all located in the Black Hills.

B9 Creations graduated from Ascent Innovation in January 2019 and moved into an 18,000 sq ft facility in west Rapid City. From a Kickstarter company to a global 3D printer manufacturer, B9Creations has become the industry leader in production, speed, and value. With an ever-increasing catalog of 3D printing solutions, it now stands as the market leader in jewelry, prototyping and manufacturing, research, medical devices, and model making. B9 now employs over 25 people locally.

Property Meld graduated from Ascent Innovation in July 2019 and moved into a 10,000 sq ft space in downtown Rapid City. Property Meld created a maintenance automation tool to allow property management businesses to automatically schedule, track, and communicate in one place. The company operates in every U.S. state with employees all over North America, including more than 30 in Rapid City.

Thank you for strengthening our partnership as Ascent Innovation and South Dakota School of Mines and Technology are developing a new culture of entrepreneurship, commercialization and technology transfer.

Sincerely,

Terri Haverly, Executive Director
Ascent Innovation

Mitch Nachtigall, Client Manager
Ascent Innovation

Ascent Innovation Tenants as of October 1, 2019

7400 Circuits

AMPTECH

Applied Research Associates

Black Hills Information Security

Black Hills Knowledge Network

Black Hills Technologies

CHR Solutions

ebb

Elevate Rapid City Economic Development Division

FullSend Ski Company

INNORAYMOND

Innovative Systems

Nanopareil

Nanocoatings, Inc

North Atlantic Industries

Novum Nano

Nucor Steel

Omnitech

Raven Industries

SD Governor's Office of Economic Development

UNIVERSITY OF SOUTH DAKOTA
DISCOVERY DISTRICT

October 15, 2019

Nathan Lukkes
General Counsel
South Dakota Board of Regents
306 East Capitol Avenue, Suite 200
Pierre, SD, 57501

Re: Annual Activity Report

Dear Mr. Lukkes,

The USD Research Park, Inc. (USD Discovery District) sincerely thanks the South Dakota Board of Regents for their investment. With your support the Discovery District will create opportunities to collaborate and impact the future of innovation in the state of South Dakota.

Per the executed agreement dated June 20, 2019 between the District and the Board of Regents, please find the below Activity Report for the period of November 30, 2018 to October 15, 2019.

PROJECTS/INDUSTRY INTERACTIONS

- Project one is approaching design completion with construction projected to start in early 2020;
- Continued discussion with potential tenants and developers; and
- Completion of Phase IIB of streets and infrastructure estimated to be completed by the end of 2020.

SOURCE OF FUNDS

Annual Operating - 2019:	$150,000 – Forward Sioux Falls
(exceeds 1:1 match requirement)	$150,000 – City of Sioux Falls
	$150,000 – University of South Dakota
	$100,000 – SD Board of Regents
	$ 20,625 – Ag Lease Revenue
	$570,625 TOTAL

4800 North Career Avenue, Suite 100 • Sioux Falls, SD, 57107
www.usddiscovery.com • 605.275.8000 • 605.275.8001 *fax*

UNIVERSITY OF SOUTH DAKOTA
DISCOVERY DISTRICT

Infrastructure:

$	755,000 – EDA Grant - Phase I matching grant
$	500,000 – Forward Sioux Falls (over 5 years)
$	500,000 – General Fund Appropriation
$	394,136 – USD Note *
	$1,513,130 – City of Sioux Falls **
	$3,662,266 TOTAL

** To be repaid over 10 years*
*** For 2018-19 Infrastructure project identified under Capital Investments section*

The City of Sioux Falls, Forward Sioux Falls, the University of South Dakota have approved continued funding at the above levels for 2020.

EXPENDITURE OF FUNDS

Funds have been expended/committed for the following purposes during this time period:

Capital Investment:

As of October 31, 2018, $1,865,380.95 has been invested in infrastructure. Completed or in process capital projects include previously completed streets and the initial Phase IIA construction of Haines Street and Pell Avenue. Additional planning and design work has been completed for the development of pedestrian and bicycle trails.

Construction of Haines Street and Pell Avenue around Block 11, as well as the adjacent streetscape and shared parking, began in 2019 with estimated completion in 2020. The total project cost is an estimated $1,663,130 and will be funded through a $1,513,130 appropriation from the City of Sioux Falls, remaining EDA grant and Discovery District funds including funds provided by Forward Sioux Falls. The City approved a two-year funding agreement on June 12, 2018 with $500,000 approved in the 2020 budget. This will require an amendment to the previously executed agreement.

Non-Capital Expenses:

Total budgeted non-capital expenses for CY 2019 are projected to be $604,343 for the following uses:

- Service agreement with USD for staffing;

UNIVERSITY OF SOUTH DAKOTA
DISCOVERY DISTRICT

- Professional services, including consulting and legal for developing: Site Development Lease, Construction Agreements, new Legal Entity formation, and Design Standards;
- Marketing of the Discovery District.

NEW JOBS CREATED

0 – Pending first facility construction

STATE REVENUE GENERATED

TBD – Contractors excise tax and sales tax will be calculated after first building project closeout

CAPITAL INVESTMENTS COMPLETED

$1,534,874 – Phase 1 Street and Public Utility Infrastructure
$48,591 – Private Utility Infrastructure

CAPITAL INVESTMENTS IN PROCESS

$1,663,130 – Phase 2 Street, Public Utility & Shared Parking Infrastructure
$31.8 MM – (estimated) Multi-Tenant and Manufacturing Building Construction

The USD Discovery District will provide its next Activity Report by October 15, 2020.

Thank you for your continued support,

Ryan Oines
USD Discovery District

4800 North Career Avenue, Suite 100 • Sioux Falls, SD, 57107
www.usddiscovery.com • 605.275.8000 • 605.275.8001 *fax*

October 15, 2019

Nathan Lukkes
General Council, SD Board of Regents
306 East Capitol Ave.; Suite 200
Pierre, SD 57501

Mr. Lukkes:

The SDSU Growth Partnership Board and staff would like to once again thank the SD Board of Regents for the ongoing investment. These dollars assist in a state-wide research effort as well as the development of the state's research parks.

The following items depict the accomplishments.

- The Growth Partnership has created a strong team:
  - SD Board of Regents
  - SD State University
  - SDSU Foundation
  - SD State Legislators
  - The City of Brookings
  - The County of Brookings
  - Brookings Economic Development Corp.

- Research Park/Brookings Innovation Center – General Operating Revenues of $705,000 with Expenses of $690,000.

- Brookings Innovation Center
  - 98% occupied
  - 41 businesses
  - 127 employees

- The Brookings County Commission has increased its annual investment from $50,000 to $65,000 effective January 2019.

- The Growth Partnership has continued to work key strategies that lead to growth opportunities.
  - A 10-year Research Park strategic plan:

- **Startup/entrepreneurs** have participated in our student/faculty and industry innovation centers. We continue to have great success with our business development efforts.

- **Lab** needs, wet and dry, have been identified through programming efforts we have identified a need for a 45,000 square foot facility.

- A 10-year Bio Science strategic plan:
  - **Meetings** are underway with potential industry partners who have indicated a need/desire to work with SDSU and locate at the Research Park. The opportunities exist in Pharmacy, Dairy Science, Animal Science, and Plant Science. A bioprocessing facility is in early stages of development.

- A 10-year College of Engineering strategic plan:
  - **Faculty** led startups are now located in the Brookings Innovation Center (4). These startups employ 7 students. One of these companies has 8 employees. We assisted the company in creating a partnership with Dakota State University. Research Park staff and programming provided additional assistance to this company as it raised more than $1M of investment dollars.

Additionally:

- 70 students created 40 teams for the entrepreneurial idea competition. Each team has been partnered with an industry mentor.
- Recruitment and negotiations efforts are in progress with additional industry partners. The JL Lohr College of Engineering and Research Park staff made several key industry visits.
- 4 companies are negotiating with the Research Park to develop a presence in the Brookings Innovation Center.
- Raven Industries Corporate Innovation Center has grown from 500 SF up to 2,000 SF.
- 265 + employees work at 41 client companies located in the Research Park generating an annual payroll of more than $13.6M. 27 plus students work in the Research Park.

The Research Park staff continues using these strategic plans as a guideline to grow the Research Park, state and region. The staff continues its work with Pharmacy, Health and Nutritional Sciences, and Plant Science. These projects will identify university/industry research opportunities.

Thank you again for the partnership that you have created with the Research Park as SDSU!

With warmest regards,

Dwaine M. Chapel

Dwaine Chapel
CEO/Executive Director
SDSU Growth Partnership
Research Park at SDSU