

Legacy Fund earnings – Economic Development and Research Request: As one of the nation's premiere research institutions, NDSU role as North Dakota's sole R1 research university is to provide leadership in programs that will create tomorrow's workforce through advanced research and innovation across four key priority areas.

- 1. Food, Energy and Water Security: North Dakota plays an indispensable role in efforts to improve the resiliency and sustainability of the U.S. food, energy, and water systems. These systems and their security are vitally important to the state's economy. NDSU is engaged in work across many facets towards these efforts: promoting energy sustainability and stewardship; studying the impact of human activity on water systems; supporting tribal food sovereignty and improving public health and nutrition; innovating sensors, electrification, automation and autonomous systems through connectivity and telemetry; supporting field-ready engineering technologies using artificial intelligence, data science, and other tools (especially to advance precision agriculture and ag tech); and ensuring resilient, safe and secure economic and social systems to minimize risk.
- 2. Cybersecurity, Computer Science and Software Engineering: Essential both today and into the future, NDSU's expertise in these areas fit well within the institution's mission of serving as North Dakota's landgrant university. Because the agriculture and energy industries are vital to the state's economy, their vulnerability to cyber-attacks means cybersecurity is increasingly tied to the state's economy and a high priority for research investment. Protecting our computer systems, networks, and programs in the face of digital attacks from across the globe serves the citizens of our state while strengthening our national security.
- 3. **Life Sciences:** NDSU's land-grant mission also challenges us to ensure the health of all North Dakotans by carrying out meaningful biomedical and health-related research. By building on our successes, we advance the state's capabilities in life sciences and create economic growth through opportunities for North Dakota companies to successfully create biotechnology and biomedical devices in this space. Life sciences investments also have the potential to save North Dakota money in the long-term by creating better health outcomes for citizens that enable lower health care costs.
- 4. **Entrepreneurship and Innovation:** North Dakota has historically been at the leading-edge of workforce development, entrepreneurship, and innovation and the state has played an essential role in encouraging the commercialization of ideas. North Dakota continues to attract top talent to the state who support established industries such as manufacturing, technology-based businesses, autonomous systems, biotechnology, and bioscience, advanced materials and manufacturing, and agricultural and energy. NDSU's contributions in all these fields area are wide-ranging, especially in engineering. NDSU alumni have founded thriving companies like Aldevron, Phoenix International, Appareo, and Bushel. NDSU seeks to continue to drive and support North Dakota's thriving entrepreneurship and innovation ecosystem by creating and nurturing the innovators and the workforce of tomorrow.

Block grants: NDSU requests block grants to build capacity in human and physical research infrastructure (excluding new buildings) and for basic and applied research projects, programs and initiatives with the goal of continuing the research priorities and ensuring their successful outcomes This way, NDSU can continue delivering on its land grant mission of providing transformational education, creating knowledge, and sharing it through community engagement that meets the needs of North Dakota and the world.