



University of Nevada, Reno

Knowledge Fund Investment

Funded by Nevada Governor's Office of
ECONOMIC DEVELOPMENT



\$8.7M

Knowledge Fund investment over 8 years



\$137M

in venture capital raised by affiliated startups



300+

companies, agencies, orgs engaged through memberships or agreements



670+

jobs created by affiliated companies



39

companies with University-based operations



\$32M+

in grants, contracts, gifts, agreements

Programs Supported: Serving Nevada's Economic Growth

Nevada Center for Applied Research

Providing industry, entrepreneurs and agencies access to the University's labs, equipment and expertise by:

- Offering **access to more than 55 leading-edge labs and services.**
- Offering **affordable co-working and laboratory space on campus.**
- Facilitating **large-scale research initiatives** involving coalitions of public and private stakeholders.
- Supporting **incubation of early-stage businesses, predominantly biotech,** with resources and mentoring.
- Supporting **workforce development** and experiential learning for students.

Innovation Center

A hub of entrepreneurialism and innovation in downtown Reno, facilitating access to mentorship, investors, makerspace, interns and more. Supported in part by the Knowledge Fund and open to the community through a membership model:

- Members represent 57 companies and organizations.
- Members created 500+ jobs, raised \$88.5M in capital.

Nevada Advanced Autonomous Systems Innovation Center

Developing robotics, artificial intelligence and autonomous systems, with current research that includes:

- **Drone and unmanned aerial operations, driverless cars, advanced manufacturing systems, underground and underwater robots.**
- **Nevada Gold/Barrick partnership** testing underground robotics applications for exploration and safety.
- Development of **large high-bay area to conduct University or industry drone tests** with accuracy of position and orientation.
- Established testing **safety procedures that have been validated** through field trials since 2015.

Knowledge Fund-supported efforts – Further RESULTS since 2013

- **\$32.5M** total grants and donations received
 - Includes **\$23.4M** in sponsored-research contracts (grants and fee-for-service)
- **14** spin-off companies
- **20** companies relocating to Nevada
- **7** faculty hired full-time by Knowledge Fund
- **10** faculty receiving some portion of support
- **87** student interns engaged with projects (hired by affiliated companies)
- **11** student employees (hired by University)
- Patents filed by University – none, work in progress
- **42** patents filed by companies incubated in NCAR
- **670** Jobs created
- Commercialization revenue to University – none, work in progress
- **\$136.5M** commercialization revenue (venture capital) to affiliated companies

Intelligent Mobility

Developing solutions for safe, clean and efficient transportation. This statewide effort coordinated through NCAR involves:

- **Public and private stakeholders** including the Regional Transportation Commissions of Washoe County and Southern Nevada, cities of Reno and Henderson, Nevada Department of Transportation, The National Judicial College and Fraunhofer IVI, as well as businesses such as Switch, Proterra, Dell EMC and Velodyne Lidar.
- **Researchers with expertise** in synchronized transportation, advanced autonomous systems, computer sciences and robotics, geography, social psychology and judicial studies.
- **“Living Laboratory” real-world test sites in Northern and Southern Nevada**, with “lidar-enhanced” roads able to communicate data to connected vehicles.

Water Innovation Campus

Addressing water problems in Nevada through collaborations with the cities of Reno and Sparks, Truckee Meadows Water Authority, Western Regional Water Commission and Nevada Department of Transportation. Research includes water reclamation and reuse applications, stormwater management, industrial water and waste management and more.

Sierra Accelerator for Growth and Entrepreneurship (SAGE)

Initially launched in 2019, the statewide SAGE program expanded with Knowledge Fund support in 2020. SAGE is designed to put Nevada’s qualified small, technology-based businesses on the path to earn federal grant funding through the competitive SBIR and STTR programs.

Making a Difference for Nevada

“NCAR was an attractive place for us to incubate and then scale. Most of our hires have been from the University. The proximity made it easy and they are talented employees. We want to be part of putting Reno on the map for biotech.”

- *Jonathan Hull, co-founder of Bioelectronica which grew from 2 employees to 12 while based in NCAR*

“The collaboration with the University is an important step in Flirtey’s growth by allowing us to use their facilities and test Flirteys on campus. ... With its close proximity to Silicon Valley, budding tech scene and the state’s strong aeronautical history, Reno is positioned to become the biggest little city in the world of UAV space.”

- *Matt Sweeny, Flirtey, which grew from 2 to 30 employees, completed first-ever commercial drone delivery in U.S.*

“(The Innovation Center) did more than help provide a location to meet people; it gave me like-minded people who are as crazy as I am to leave what you know **to do something you believe in.**”

- *Mark Ferguson, founder Lulus Innovation, which grew from 1 to 8 employees and plans to double in 2021*

“The Nevada Center for Applied Research is charting a path to create the smart cities of the future by enabling multimodal communication between infrastructure, vehicles and people.”

- *Jon Barad, Vice President of Business Development, Velodyne Lidar, an Intelligent Mobility partner*

“The University is so important to the economy and the future of our region that the business community has to be closely connected to it.”

- *Mike Kazmierski, CEO, Economic Development Authority of Western Nevada (EDAWN)*

For more information

Carlos Cardillo, Director, Nevada Center for Applied Research | (775) 682-5203 | ncar@unr.edu | unr.edu/ncar.

(R&I, 6/16/2022)