

Developing the Next Generation of Leaders through 4-H Youth Development

A recent longitudinal study discovered that the structured out-of-school time learning, leadership experiences and adult mentoring that young people receive in 4-H play a vital role in helping them achieve success – academically, socially and civically. These successful outcomes are attributed to the key characteristics of positive youth development (PYD) that are a hallmark of 4-H programs.

The expansion of Extension’s 4-H Youth Development program will focus on STEM education, career and college readiness, workforce development, healthy living, civic engagement, residential camping and volunteer development. Middle school youth will participate through 4-H clubs, in-school enrichment opportunities, linked learning, co-curricular projects, afterschool programs, day camps, residential camps and more.

Nevada 4-H Youth Development five-year goals:

1. **Increase number of 4-H participants** to 100,000: *50% increase from 50,000 current participants/10% increase annually*
2. **Increase program excellence** with high-quality 4-H professionals and volunteers: *hiring experts in PYD & doubling the number of volunteers*
3. **Addressing workforce and industry education needs:** *new programs will include a college and career readiness component and a comprehensive evaluation component to determine their effectiveness*

4-H College & Career Pathways Pilot: A Strategic Partnership

In 2019, Nevada System of Higher Education Chancellor Dr. Thom Reilly signed a Memorandum of Understanding with Clark County School District, UNR Extension, Nevada State College, College of Southern Nevada, and the University of Nevada, Las Vegas. This strategic collaboration aims to bridge the gap between school performance and workplace success by combining the best of experiential learning and academic rigor.

To develop a more competitive, prepared and entrepreneurial workforce, the program will link directly to the Nevada Academic Content Standards and the Governor’s Office of Workforce Innovations with three **primary objectives**: 1) Increase **essential life skills** for college and career success, 2) Increase **academic engagement** and 3) Increase awareness of **STEM communication** skills.

The initial results will be used to modify and improve the delivery and scale the College and Career Pathways Middle School Program* across Clark County School District and all of Nevada school districts.

To achieve the above goals, we propose new Extension personnel in the following areas:

- Twenty academic instructors/Extension Educators with Master’s-level PYD expertise, at least one per county
- Five statewide academic faculty positions to enhance and expand programming: *4-H youth STEM specialist, civic engagement specialist, volunteer specialist, animal science specialist and natural resource specialist*
- Hire two full-time Administrative Assistants to support the state 4-H office, five new 4-H specialist positions and county-based academic instructors.

Extension’s State 4-H Youth Development Program Priority Request	Annual Costs
Personnel	
Academic Instructor, Master's Level Faculty (20 positions @ \$66,000)	\$1,320,000
Academic Faculty, Volunteer Specialist, 4-H Natural Resource, Animal Science, Civic Engagement	
4-H STEM Specialist (5 @ \$93,000)	\$465,000
Admin Assistant (2 positions @ \$40,000)	\$80,000
Subtotal	\$1,865,000
Fringe Benefits	
Academic Instructor, Master's Level Faculty (20 positions @ \$19,424)	\$388,480
Academic Faculty, 4-H (5 positions @ \$27,370)	\$136,850
Admin Assistant (2 position @ \$17,308)	\$34,616
Subtotal	\$559,946
Operations	
Academic Instructor, Master's Level Faculty Operations, which includes travel, program supplies, office supplies, equipment (20 positions @ \$15,000)	\$300,000
Academic Faculty, 4-H Specialist, which includes travel, program supplies, office supplies, & equipment (5 positions @ \$20,000)	\$100,000
Admin Assistant (2 positions @ \$5,000)	\$10,000
Youth and Volunteer program support for participation in events and activities at state, regional, and national level	\$145,000
Subtotal	\$555,000
One-Time Costs	
Start-Up Costs for Academic Faculty/Specialists (5 @ \$40,000 each)	\$200,000
Subtotal	\$ 200,000
TOTAL COST for the Biennium	\$3,179,946

*The College and Career Pathways Middle School Program is contingent on State funding.

Developing Nevada’s Economy through Sustainable Food Systems, Natural Resources and Dryland Agriculture

More than 12% of Nevada households are food insecure, with limited or uncertain access to food. One in eight Nevadans struggle with hunger, increasing to one in five among children. Additionally, Nevada relies heavily on imported food, which leaves the state vulnerable to devastating disturbances in the food system. Combating hunger and food insecurity with a comprehensive, interdisciplinary approach will help ensure every Nevadan has access to a safe and abundant food supply, while also providing economic growth across the state through new industries and related jobs.

Through Extension, the University of Nevada, Reno brings vital, practical information to agricultural producers, small business owners, consumers, families, and young people. Expanding Extension’s expertise in sustainable food systems, dryland agriculture and controlled environment horticulture will improve health, education, workforce and economic outcomes across the state.

Additionally, increasing public research, education and assistance in animal science and livestock production, indoor crop production, efficient water-use technologies, pest and disease avoidance, and related topics will improve the profitability and vitality of the state’s industry. Along with expansion of greenhouses and other facilities, these efforts will help commercial, small-scale and residential growers produce food in Nevada’s challenging climates in a manner that is economically viable.

To achieve the above goals, we propose new Extension specialists in the following areas:

- **Controlled Environment Horticulture:** *focusing on the cultivation and management of growing hemp, vegetables and other crops under protected structures such as hoop houses and automated greenhouses*
- **Weed, Entomology and Plant Pathology:** *managing pests in arid ecosystems and addressing emerging issues in plant and animal health and protection*
- **Agriculture Economics:** *optimizing production and distribution of food, feed and fiber*
- **Water:** *focusing on efficient irrigation and agricultural water use, including research on alternatives to water-intensive crops like alfalfa, and new cash crops that have significant economic potential, such as hemp*
- **Natural Resources:** *focusing on precision agriculture, land-use planning policy and training to increase agriculture production, efficiency and profitability*

Many of the new positions will be located in Clark County but will serve the entire state. The remaining positions will be located in targeted locations across the state.

These new specialists and current Extension faculty will support communities by providing research-based information and scientific expertise that helps answer both practical and policy-related questions in their field.

Requested Funding Areas	Annual Costs
Personnel	
Academic Faculty, Specialists (7 positions @ \$92,400)	\$646,800
Fringe Benefits	
Academic Faculty, Specialists (7 positions @ \$27,194)	\$190,358
Operations	
Academic Faculty, Specialists (7 @ \$15,000) <i>Includes travel, program supplies, office supplies & equipment</i>	\$105,000
Total Annual Costs	\$942,158
One-Time Costs	
Start-up costs for Academic Faculty, Specialists (7 @ \$80,000 each)	\$560,000
Build or improve existing outdoor Research & Demonstration facilities*	
Subtotal	\$560,000
TOTAL COST for the Biennium	\$1,502,158

*Additional needs include building or improving upon Research and Extension Centers, including new demonstration facilities, buildings and outdoor spaces for workshops, new green houses and other growing structures, and related equipment and materials.

Total Enhancement Request for Biennium: \$4,682,104