

2021 - 2025 Planning Report

Institutional Academic, Research, and Student Service Plans

December 2020



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INTRODUCTION

The Nevada State Legislature mandates that public higher education institutions compile a comprehensive report on program plans. Therefore, this report is prepared in accordance with state law requiring the Nevada System of Higher Education (NSHE) to prepare a biennial report for submission to the Nevada State Legislature that outlines plans for new programs and expansions of existing programs of instruction, public service and research. Specifically, Nevada Revised Statutes 396.505 provides the following:

- 1. The Board of Regents shall prepare a comprehensive plan for the next 4 years which explains:
 - (a) Any anticipated new programs and expansions of existing programs of instruction, public service or research, itemized by year and by purpose;
 - (b) The anticipated cost of each new or expanded program described under paragraph (a);
 - (c) The amount and source of any money anticipated to be available, from sources other than legislative appropriation, to meet each item of anticipated cost listed pursuant to paragraph (b); and
 - (d) Any further information concerning its comprehensive planning which the Board of Regents may deem appropriate.
- 2. The Board of Regents shall biennially bring the plan up to date for the ensuing 4 years, and shall present the revised plan to the Legislature not later than February 1 of each odd-numbered year.

This report summarizes the institutions' academic and research plans, also in accordance with Board policy (Title 4, Chapter 14, Section 3.3 of the *Handbook*). These plans must be viewed in the context of an institution's overall budget and fiscal capacity, as well as demand for the program. In some cases, the plans may include academic programs that are being discussed or considered for the future, but they may not ultimately be brought forward for approval for a variety of reasons. However, they are included in the report as an indication of what may come forward within the next four years. Many of the anticipated programs are projected to be funded with federal grants, making some programs more likely than others to begin in times of limited state resources. To that end, these lists may be viewed as "wish lists" based on resource availability.

Because this report is updated and published every two years, it is often the case that institutions may have programs on the list from several years back and continue to roll them forward in the hope that eventually resources will be available to develop such programs. The plans are intended to notify various constituencies, including the Board of Regents and the Legislature, of what institutions are hoping to develop and believe is needed for them to meet their mission and the needs of the state, but they should not be construed as definitive in terms of the date of implementation.

The current NSHE Strategic Goals can be accessed <u>here</u>.



UNIVERSITY OF NEVADA, LAS VEGAS

Overview

The University of Nevada, Las Vegas (UNLV) is a public research institution committed to excellence and impact in teaching, research, and public service. UNLV is recognized by the Carnegie Foundation for its very high research activity as well as for its community engagement. Through progressive curricular offerings, cutting-edge interdisciplinary scholarship, and cooperative engagement with its local and extended communities, the university seeks to create, disseminate, and apply knowledge for the improvement of society—and to prepare a new generation of citizens and leaders who are equipped with the knowledge and skills to fortify the workforce and lead lives of impact in the world.

Accredited by the Northwest Commission on Colleges and Universities (NWCCU), UNLV attracts top students and faculty, educates a diversifying population and workforce, and drives economic activity through innovation, research, and community partnerships. The university has the only School of Law and School of Dental Medicine in Nevada, and is a charter member of the Mountain West Conference, a collegiate athletic conference affiliated with the National Collegiate Athletic Association (NCAA).

With 69% of its degree-seeking undergraduate students identifying as part of a racial or ethnic minority, UNLV is one of the nation's most diverse institutions. The university meets federal Minority-Serving Institution (MSI) requirements as an Asian American, Native American, and Pacific Islander-Serving Institution (AANAPISI), and as a Hispanic-Serving Institution (HSI).

Strategic Objectives

In 2018, UNLV was awarded R1 status for "very high research activity" by the Carnegie Classification of Institutions of Higher Education. Of approximately 4,000 institutions nationwide, UNLV now is one of approximately 130 with this distinction. In addition, UNLV holds the Carnegie Foundation's national elective community engagement classification. Both designations are the gold standard for university metrics. These accomplishments were central goals of the Top Tier Strategic Plan, which envisions that UNLV will become one of the nation's premier public universities in education,

research, and community impact by 2025.

The university's mission states: "UNLV's diverse faculty, students, staff, and alumni promote community well-being and individual achievement through education, research, scholarship, creative activities, and clinical services. We stimulate economic development and diversification, foster a climate of innovation, promote health, and enrich the cultural vitality of the communities that we serve."

UNLV recognizes the importance of infrastructure and shared governance in all aspects of its operations and activities. A strong infrastructure and a healthy model of shared governance model are essential to the university's four core themes and their associated priorities:

Student Achievement – Students come to UNLV with the expectation that the time they spend with us will help improve their life after they leave. We will continually demonstrate that we value students and consider their success our mission. Our priorities are to:

- Ensure the quality of learning experiences and support services—especially academic advising and peer mentoring—as we recruit, retain, and graduate a diverse student body.
- Be an institution of opportunity where members of groups who are traditionally underrepresented in higher education can receive the support they need to achieve their educational and professional goals.
- Grow capacity for degrees that address high-need areas within the workforce.

Research, Scholarship, and Creative Activity – Research, scholarship, and creative activity are central to our mission, and we will provide comprehensive support for the work of the researchers and students who have joined UNLV to make significant contributions to their fields of inquiry. Our priorities are to:

- Pursue research, scholarship, and creative activities with high impact.
- Promote opportunities for economic development and technology transfer.
- Develop innovative graduate and professional programs.
- Seek opportunities for external funding and support.
- Support the research and grant-writing efforts of non-faculty researchers and postdoctoral scholars.

Academic Health Center – Healthcare delivery and services are a critical need for our region. We will work to establish an integrated Academic Health Center for Southern Nevada. Our priorities are to:

- Ensure that our clinical practices are able to continue serving the general community.
- Support the path for the School of Medicine to attain full accreditation and produce graduates.
- Establish close partnerships among our various health-related educational units.
- Continue to articulate the critical importance of healthcare and value of services to obtain funding and resources from a variety of sources.

Community Partnerships – UNLV has long been a key player in the economic, social, and cultural development of our region. Because we receive direct support from the state, our community continues to rely upon us to develop productive partnerships and collaborations that affirm its ongoing investment in our work. Our priorities are to:

• Demonstrate the value of the university as we collaborate and engage with our community to provide expertise, service, and support.

- Help economic development and recovery efforts in our region by connecting business with needed resources.
- Provide support for our outward-facing areas such as Athletics, Thomas & Mack, Performing Arts, as they provide programming that is beneficial for our community.
- Maintain our donor and alumni support.

Academic Programs

UNLV's academic programs are designed to deliver high-quality instruction and support the success of the nearly 26,000 undergraduate, 4,300 graduate, and 1,000 professional students who are enrolled at the university. These programs undergo a rigorous process of development before adoption, continuous curriculum improvement through program review, academic assessment for both courses and degrees, evaluation through the graduating senior exit survey, and additional reviews for the university's regional and discipline-specific accreditation processes. In addition to these programs, the university offers a variety of academic support services intended to promote student retention, timely progression to graduation, and other measures of student success.

The university is home to 12 diverse colleges and schools that award undergraduate and graduate degrees and certificates; 3 professional schools in the areas of dental medicine, law, and medicine; an Honors College that offers university and unit-based programming along with associated degree designations; an academic library spread across multiple (including discipline-specific) branches; and a center for academic success that provides supplemental instruction and coaching along with services for students with undeclared majors.

- Academic Success Center
- Business School, Lee
- Dental Medicine, School of
- Education, College of
- Engineering, Howard R. Hughes College of
- Fine Arts, College of
- **Graduate College**
- **Honors College**
- Hospitality, William F. Harrah College of
- Integrated Health Sciences, School of
- Law, William S. Boyd School of
- Liberal Arts, College of
- Libraries, UNLV
- Medicine, UNLV School of
- Nursing, School of
- Public Health, School of
- Sciences, College of
- Urban Affairs, Greenspun College of

As of fall 2019, UNLV's academic offerings included 84 bachelor's degree programs, 4 undergraduate certificates, 69 master's degree programs, 42 graduate certificates, 2 specialist programs, 41 research doctoral programs, and 4 professional doctoral programs.

UNLV faculty constantly monitor academic trends and the labor market, and revise the curriculum of existing degree programs, or design new programs to meet the educational and workforce demands of students and employers. For instance, the B.A. in General Studies in Liberal Arts is being proposed to offer a flexible pathway to graduation for students who do not choose a traditional

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degree program in the College of Liberal Arts. Similarly, the B.S. General Science is being designed as a streamlined degree program for non-traditional sciences majors in which rigid course sequences are replaced with STEM (science, technology, engineering, and mathematics) electives to increase options for students.

Las Vegas continues to attract and support the growth of professional sport teams. Accordingly, the proposed M.Ed. Intercollegiate & Professional Sport Management will address the increasing need for professionals with a range of management and leadership skills in sports in southern Nevada.

As another example, the interdisciplinary M.S. in Data Analytics will allow students from a wide variety of academic disciplines to acquire knowledge and skills in database technology, programming, machine learning, data governance, statistical techniques, and the application of data analytics in an organizational environment to address specific questions and problems. This innovative degree program fulfills important state needs in the technology sector, and will prepare students for the jobs of tomorrow. The B.S. in Cyber Security and Ph.D. in Water Resources are similar high-need areas for the state, region, and country. The following table provides information on all of UNLV's planned academic programs.

Academic ProgramsThe following table summarizes UNLV's plans for new programs through 2025.

Unit	New Program Name/Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Business					
	Ph.D. Business	UNLV's first doctoral program in business.	2023-2024	\$272,100 in Year 1; \$613,800 in Year 2; \$683,400 in Year 3. Costs include additional faculty lines and graduate assistantships.	None
Dental Medicine					
	Dental Public Health (DPH) Residency Program	12-month certificate program (24 months for part-time residents) offered to dentists planning careers in DPH with a focus on assessment, policy development, and assurance. The School of Dental Medicine will work closely with the Schools of Community Health Sciences and Law to ensure that additional training in public health law, public health administration/ management, and environmental hazards is incorporated into the curriculum.	2021-2022	Minimal startup costs of ca. \$500,000, after which the program will become self- supporting.	All funding will come from current School of Dental Medicine self-supporting fund balances and/or grant funding sources. All funding will come from current School of Dental Medicine self-supporting fund balances and/or grant funding sources.
	M.S./ Ph.D. in Biomaterials Science	This program will be open to dentists (D.D.S./D.M.D.) or graduates from a non-U.S. accredited (CODA) dental school, or post-baccalaureate graduates who seek credentials with interest in research with a focus on alloplastic and biomaterials sciences. The School of Dental Medicine will collaborate with the UNLV College of Engineering in translation of bioengineering principles to craniofacial intraoral applications.	2020–21	Minimal startup costs of ca. \$850,000, after which the program will become self- supporting.	All funding will come from current School of Dental Medicine self-supporting fund balances and grant funding sources.

Unit	New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Education					
	M.S. Learning Analytics and Psychometrics	This degree will leverage current resources and faculty expertise related to learning analytics, educational assessment, and psychometrics. Students will be prepared to collect and interpret real-world educational data that do not fit into standard analytical frameworks. Students will be able to apply their conclusions to creatively address issues in educational settings. Potential fields of study include learning analytics, sport analytics, and testing/assessment analytics (psychometrics).	2022-2023	None	Grants to support graduate assistants. There is strong donor potential to support additional personnel and other resources.
	M.Ed. Intercollegiate & Professional Sport Management	This degree will address the increasing need for professionals with a range of management and leadership skills in sports in southern Nevada. The degree will support UNLV's Top Tier Core Themes 1 (Student Achievement) & 4 (Community Partnerships), as Las Vegas continues to attract and support the growth of professional sport teams.	2021-2022	No additional resources will be needed until the program has attained adequate enrollment growth. When that happens, it is anticipated that one additional faculty line (i.e., Faculty in Residence) will be need for Fiscal Year 2023.	Differential fees, to support part-time instruction costs; grants to support a graduate assistant for the program.
Fine Arts					
	B.A. Creative Practice	A degree to develop artists with unique skill sets, such as business, management, and law, who can become "creatives" across a wide range of industries.	2021-2022	None	None
Integrated Health Science					
	B.S. Health Science	This program will focus on training students for jobs as health educators.	2021-2022	\$400,000	None
	M.S. Physician Assistant	This program will focus on the training of Physician Assistants, which are sorely needed in Nevada.	2023-2024	\$500,000	Differential fees.
Law					
	LL.M. in the American Legal System	A general LL.M. for internationally educated attorneys who can take general courses or tracks that mirror existing J.D. concentrations.	2021-2022	None	None

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Unit	New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Liberal A	rts				
	B.A. General Studies in Liberal Arts	This degree will be marketed to students with 90 or more credits who have not graduated.	Fall 2021	Approximately \$10,000	None
	Ph.D. Psychological & Brain Sciences	This is an existing concentration being elevated to a full degree.	Fall 2021	Approximately \$375,000 per year.	None
Public H	ealth				
	MPH Generalist (Online)	Graduates will have a broad background in the core concepts of public health, including epidemiology, biostatistics, environmental health, and social behavioral health.	2021-2022	Additional PTI funding, two dedicated assistantships for the first four years, and incentives for online course development.	Grants, industry support, and philanthropy.
Sciences					
	B.S. General Science	This is a streamlined degree program for non-traditional sciences majors. Rigid course sequences replaced with STEM (science, technology, engineering, math) electives, to increase options and graduation rates.	2020-2021	None. Resources within the College of Sciences are currently sufficient for implementation.	None
	Ph.D. Biochemistry	Biochemistry Ph.D.'s are experts in chemical and physical processes that occur within living organisms. Graduates are prepared to enter professional careers in academia, pharmaceutical research, biomedical industry, public health, and related fields.	2020-2021	None. Resources within the College of Sciences are currently sufficient for implementation.	Grants
Interdisc	iplinary				
Degrees	B.S. Cybersecurity	Undergraduate program that teaches skills for students to enter the workforce as cyber analysts or in related areas.	2022-2023	\$250,000	Grants, industry support, and philanthropy.
	M.S. Experience Design	Prepares students for the "experience economy" in which consumers purchase "experiences".	2022-2023	Three faculty positions over three years, \$400K for faculty salary and benefits. Three MS GRAs for two cohorts. If state funding does not support the required resources in the short term, the participating Colleges will raise the necessary funds to support Gas, and use existing faculty and PTI resources.	Grants, industry support, and philanthropy.

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Unit	New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Interdis	sciplinary				
	Ph.D. Materials Science & Engineering	Graduates will have broad background in Materials Science and Engineering covering theoretical design and simulation, experimental development and creation of novel materials with unique and tailored properties and applications surrounding these materials. They will be able to find employment in research institutes, academia, and industry.	2021-2022	Administrative Assistant @ \$65K. Four dedicated graduate fellowships or assistantships per year for the first four years.	Grants
	Ph.D. Water Resources	Graduates will have broad background in water studies spanning technical issues of management, reclamation, use, policy, law, and applications. They will be able to find employment in research institutes, academia, water districts, and industry.	2022-2023	Administrative Assistant at ca. \$65K. Four dedicated graduate fellowships or assistantships per year for the first four years.	Grants

Workforce Development Efforts

In today's rapidly evolving and technology-driven economy, employers are looking for workers who possess versatile skills along with core knowledge. Therefore, UNLV must equip graduates with the competencies to adapt classroom learning to the needs of the modern workplace. The university curriculum must provide students with the tools to navigate the new economy and the skills to pursue novel, high-reward careers. There must also be strong co-curricular emphasis on career outcomes to help students develop the knowledge and skills to thrive in the new economy after they leave UNLV, as well as for years into the future.

Accordingly, the university developed a Workforce Development Strategic Plan that identifies key priorities for preparing UNLV's students for workforce success and career mobility. The key priorities are: (i) offering diverse degree and certificate programs for the 21st century economy that are valued by employers and are associated with high-demand occupations in the region, (ii) integrating workforce readiness into all academic programs, and (iii) promoting active student participation in career planning through a lifecycle approach to workforce readiness.

A Workforce Development Taskforce was convened to address these key priorities and to establish, implement, and enhance the opportunities for students to engage in high impact practices associated with increased career mobility. A report outlining the Taskforce recommendations will be submitted to the executive leadership in Fall 2020; upon approval, the Taskforce will advance to the implementation phase of the initiative.

Academic Advising and Student Success Programs

Both institutional and national data show that academic advising makes a difference in students' persistence and progress toward graduation. Therefore, it is critical that we continue to build capacity so that all students have regular contact with an advisor throughout their academic journey. The investment in 23 additional advising positions will meet the NSHE mandated student:advisor ratio of 350:1, and allow advisors to proactively address unique needs at each state of a student's life cycle.

The implementation of corequisite instruction in fall 2021 requires academic advisors to monitor more closely the continuous enrollment and completion of gateway mathematics and English courses within the first year. We will strategically coordinate the efforts of our first year advising team, the Retention, Progression, and Completion Coordinators, and the Office of Undergraduate Education to advance effective strategies, including 15 to Finish, gateway course completion in the first year, and proactive advising.

Peer mentoring is another essential component of UNLV's success plan for first-year students. UNLV has established peer mentoring programs in every College and School to provide centralized program assessment and training for mentors. Our goal is to build capacity in these programs, so that every first-year student who wishes to participate can have an assigned peer mentor.

Finally, we want to ensure that every first-year UNLV student has a productive start in their first semester. Accordingly, we plan to expand our Summer Bridge offerings to allow incoming students to practice and enhance their mathematics and writing skills, place into the college level courses most appropriate to their skill level, and get a head start on their academic requirements with a first -year seminar, all before their first fall enrollment at UNLV.

Student Services

The university is committed to student success from the day students arrive for orientation, during their time on campus, and into their chosen careers. This commitment includes an innovative curriculum with a defined course path for undergraduates, an intensive first-year advising program and peer mentoring, and a dedicated Academic Success Center that supports students through coaching, student-athlete academic services, supplemental instruction, and tutoring services. A broad array of research opportunities for undergraduate and graduate students strengthens the academic experience and allows students to tackle pressing real-world issues alongside top faculty. The importance of serving our students throughout their journey is a key priority. Additional student services include the following.

- The UNLV Dual Enrollment Program provides highly motivated Nevada high school students the opportunity to get a head start on their college education by enrolling in UNLV courses before high school graduation.
- The Writing Center consults with writers at any level of expertise to help improve their skills.
- The Rebel Wellness Zone offers student-centered wellness education and resources to students.
- UNLV's Multicultural Program encourages and recruits minority and underrepresented undergraduate and graduate students into the science, technology, engineering, mathematics (STEM), and healthcare related disciplines.
- The English Language Center prepares students to use English effectively in all situations.
- Student governments, Consolidated Students of the University of Nevada, Las Vegas (undergraduate) and the Graduate and Professional Student Association, promote and represent student interests.
- There are more than 380 Registered Student Organizations that encompass a variety of interests, activities, and beliefs on campus.
- More than 500 student-athletes compete in 17 NCAA Division I Sports in both the Mountain West and Western Athletic conferences.
- The UNLV Center for Social Justice is a resource that unites students and educates them about advocacy against social injustices that affect campus, local, national, and global communities.
- The Intersection is an academic multicultural center that provides a safe space for students, faculty, and staff to gather, exchange ideas and information, and develop a sense of community.
- Campus recreational services promote healthy lifestyles through diverse activities that stimulate personal growth and connection to the university.
- The Student Health Center provides on-campus access to medical care and a pharmacy.
- UNLV Boyd School of Law's Immigration Clinic offers direct legal assistance for students and their families who are facing challenges related to immigration.
- Mental health services are available through Counseling and Psychological Services (CAPS) and The PRACTICE, both of which provide affordable, evidence-based mental health care and high-quality training for students studying within these fields.
- Career Services supports students with resume building, interview preparation, and job and internship opportunities.

Many of our student services are organized by the Division of Student Affairs, which seeks to provide quality services and programs that create educational opportunities, foster collegiate success, enhance continuous learning, and promote a just and inclusive campus. Working in partnership with the university and surrounding communities, Student Affairs is a service-oriented division that strives to establish a safe and secure learning environment that is inclusive, dynamic, and student-centered. Some of their featured upcoming programs include:

The Center for Academic Enrichment and Outreach (CAEO) has been awarded the following four grants for Fiscal Year 2020 by the U.S. Department of Education:

• Student Support Services (SSS) Regular and SSS STEM (Grants #1 and #2)

SSS will serve more than 2,500 low-income and/or first-generation UNLV students over the five-year grant period. The goal of SSS is to increase the college retention, persistence, and completion rates of its participants. Key services include academic advising and counseling, tutoring, grant aid, and assistance in applying for admission to graduate and professional programs.

Title III MSI AANAPISI Part A (Grant #3)

The AANAPISI grant will support services for over 1,000 disadvantaged UNLV students (lowincome, first-generation, need for academic support) over the five-year grant period. The goal of AANAPISI is to increase the college retention, persistence, and completion rates of its participants, and to expand UNLV's capacity to offer web-based undergraduate courses in computer science. Key services include academic tutoring, counseling (i.e., academic, undergraduate financial-aid, career, and graduate/professional-school admissions and financial-aid), frequent, ongoing academic-progress monitoring, and financial-literacy instruction.

TRIO Training (Grant #4)

TRIO Training will serve more than 500 TRIO personnel over the two-year grant period. TRIO Training Programs are designed to assist TRIO personnel in improving the operation and success of the TRIO projects. Specifically, UNLV will train TRIO professionals on the assessment of student needs, retention, and graduation strategies, and use of technology.

Enrollment and Student Services will investigate online registration tools for students to "simulate" possible schedule configurations that students can use to maximize their course offerings, and accelerate both credit hours in a semester and time-to-degree over multiple semesters of use.

Counseling and Psychological Services (CAPS) will explore the Let's Talk Program and its viability given the current resources. The Let's Talk Program consists of informal consultation with a mental health provider to address an individual's concerns at the moment. Let's Talk is not a substitute for counseling and is not considered mental health treatment. However, Let's Talk may be beneficial to students who have questions about counseling services, have a specific question and want to briefly (10-20 minutes) discuss the issue, or have questions about resources.

Justice Impacted Students Initiative is a collaboration between the UNLV Intersection and the Office of Student Engagement to assist justice-impacted students by serving as a resource and point of contact. Some UNLV students face societal barriers as a result of their interaction with the criminal justice system. Having an arrest, criminal charge, or record of conviction can impact educational

and career opportunities. This program is designed to help justice-impacted students navigate various systems during and after their education.

Research Initiatives

UNLV is dedicated to serving its growing and dynamic region through research and economic development activities. The university's R1 designation is important, for it underscores the scope and impact of our research mission. UNLV research is central to Nevada's economic recovery and sustainability. Through academic and research partnerships, UNLV is generating critical knowledge that answers the profound questions of our time, improves the health and well-being of our residents, and enriches the cultural and intellectual vitality of our communities. Our research also directly translates to teaching, enhancing student learning while giving residents access to the latest information as it happens, and provides a valuable context to issues facing our state, nation, and world. Further, the education and training associated with the broad and diverse research activities at UNLV will help to expand job opportunities in Nevada and elsewhere.

The research goals for UNLV are centered on maintaining or increasing the level of faculty members engaged in high-quality research, scholarship, and creative activity. An effort to match faculty with research opportunities has been initiated to engage those who traditionally may not have been research active. Similarly, we expect to maintain or increase research, scholarship, or creative activity that leads to increases in research expenditures and the graduation of more doctoral students using this approach. Finally, we will increase infrastructure through public partnerships that leverage both external and internal funds to provide additional resources for cutting-edge research in support of the Top Tier initiative. Research in the areas of Brain Health, Gaming, and Radiochemistry will specifically benefit from this approach, and highlight the increased importance of public and university partnerships in research. A national search has begun for a visionary, strategic and innovative Vice President for Research who will develop and promote research to meet these goals.

UNLV has recently expanded its research capabilities in biomedicine with the establishment of the Nevada Institute of Personalized Medicine (NIPM), the Department of Brain Health, the Chambers-Grundy Center for Transformative Neuroscience, and the Shimadzu Laboratory for Brain Health. NIPM was recently funded as a National Institutes of Health (NIH) Center of Biomedical Research Excellence—the only established NIH-endorsed Center of Excellence in Nevada—to accelerate the adoption of advanced genomics for the entire state healthcare systems. The mission of NIPM is to advance personalized medicine through independent clinical research, community outreach, and genetic testing. In addition, the Chambers-Grundy Center for Transformative Neuroscience was formally launched through a \$6 million pledge from philanthropist Joy Chambers-Grundy. The Center and the Department of Brain Health offer hope through scientific discovery for patients who are suffering from Alzheimer's, dementia, and other brain and neurological diseases. In addition to the philanthropic funds the center has received, their research is also supported externally through multiple NIH grants.

The remodeling of research facilities within the Harry Reid Center and the Science and Engineering Building (SEB) has provided necessary infrastructure and laboratories in support of externally funded research, as well as additional research space for future faculty hires. Similarly, the Campus Laboratory Buildings (CLB), recently vacated by the Environmental Protection Agency, will be brought online within the next two years, and will provide instructional laboratory space and high quality lab space for expanding research activities at UNLV. Programming of the CLB is ongoing and is contingent on both current and future hiring priorities. The Division of Research and Economic

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Development is working with Shimadzu to establish a second research laboratory in Radiochemistry and Radioanalytical Chemistry. This lab would house analytical instrumentation that will allow the current Radiochemistry program to expand its research focus in nuclear forensics. This initiative will strengthen the industrial partnership between UNLV and Shimadzu Corporation, and provide valuable and needed research infrastructure in support of the Radiochemistry doctoral program and the education of the next generation of nuclear scientists that are needed to support national laboratories and USA nuclear priorities.

Expansion of research within the School of Medicine (SoM) is also ongoing. The Office of Economic Development is focusing on increasing the number of disclosures stemming from faculty in the SoM, with the goal of marketing and commercializing intellectual property. The long-term goal is to translate SoM technologies into viable products that can be utilized in the field. UNLV's Clinical Trials Office (UNLV CTO) is actively working to expand the clinical trials portfolio at UNLV by notifying potential investigators of upcoming opportunities. Additionally, the UNLV CTO is working with many sponsors and contract research organizations to expand access to the sponsored clinical trials pipeline. Expansion of research in the School of Medicine will also require access to research space. Creative solutions will be explored to provide space to School of Medicine faculty conducting research.



UNIVERSITY OF NEVADA, RENO

Strategic Themes and Objectives

The University's Mission & Core Themes, developed in its most recent Strategic Plan for the years 2015-2021, are below. The mission statement and core themes as stated in the prior planning report have not changed, nor have the goals of the individual core themes. However, the strategic plan is a "living document" that is being continually assessed via a series of metrics that have been honed over the last few years. In 2015 the Provost's Office established four committees (representing the three core themes and the overarching theme of Stewardship & Sustainability), each charged with evaluating both the metrics for their respective theme and the university's progress on those metrics and assisting with institutional initiatives and aspirations. Since the previous planning report, the University has realized two such aspirations relevant to its Core Themes 2 and 3, respectively: attaining the Carnegie R1 (Doctoral Universities – Very high research activity) classification in 2018 and the Carnegie Community Engagement classification in 2019.

Mission:

Inspired by its land-grant foundation, the University of Nevada, Reno provides outstanding learning, discovery, and engagement programs that serve the economic, social, environmental, and cultural needs of the citizens of Nevada, the nation, and the world. The University recognizes and embraces the critical importance of diversity in preparing students for global citizenship and is committed to a culture of excellence, inclusion, and accessibility.

UNR will be updating its strategic plan during the 2020-21 academic year. However, the three core themes of our mission will not change and will continue our commitment to the following:

Theme 1 – Learning: Prepare graduates to compete globally through high-quality undergraduate and graduate degree programs in the liberal arts, sciences, and selected professional programs.

Theme 2 – Discovery: Create new knowledge through basic and applied research, scholarship, and artistry in strategically selected fields relevant to Nevada and its role in the wider world.

Theme 3 – Engagement: Strengthen the social, economic, and environmental well-being of Nevada citizens, communities, organizations, and governments through community outreach and reciprocal partnerships.

Academic Programs

The following programs are in varying stages of planning in departments and colleges, with projected implementation during the planning period of 2021-25.

Unit	New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars			
	Agriculture, Biotechnology, and Natural Resources							
	Sustainable Plant Systems, MS and PhD	This research-based program will produce PhD-level scientists trained with the background and technical skills to address global challenges in drylands plant sciences	Fall 2021	No additional cost	None			
Community Healt	th Sciences							
	Doctor of Physical Therapy/ Occupational Therapy	Provide advanced professional degree for UNR BS/MS students to address significant workforce needs in Northern Nevada	2024	One Assistant professor position and one associate professor who will serve as Director of the program; four GA positions plus tuition waivers (\$335,757)	Tuition fees for professional degree program; external community support for clinical training and clinical training sites			
	Epidemiology, PhD, and Social Behavioral Health, PhD	Separate the current two emphases for the PhD, Public Health into two separate degrees: PhD in Epidemiology and PhD in Social Behavioral Health	2021	No extra costs	None			
	Health Policy, PhD	Add a PhD degree to address poor health statistics in Nevada and provide health policy guidance.	2023	Four GA positions plus tuition waivers. (\$97,561)	None identified at this time.			
	Kinesiology, BS and Public Health, BS	Convert current specializations in the BS, Community Health Sciences to separate BS degrees in Public Health and Kinesiology.	2021	No extra costs	None			

Unit	New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Engineering					
	Aerospace Engineering, BS	Includes engineering of air (fixed and rotary wing) and space flight systems, including (1) system dynamics/control, (2) solid mechanics/materials; (3) thermal/fluid science and propulsion, (4) design; and (5) advanced high-strength/lightweight manufacturing.	Fall 2022 at the earliest	Startups for seven new faculty: \$3.5M	Industry and federal sources
	Robotics, MS	An interdisciplinary program in robotics, open to students with a computer science & engineering, electrical engineering or mechanical engineering background.	Fall 2021	No additional cost	Grants
Interdisciplinary					
	Agribusiness, BS/MS	Re-introduces agribusiness education at UNR. Program will combine classes from the College of Agriculture, Biotechnology, and Natural Resources and the College of Business.	Fall 2021	No additional cost	None
Liberal Arts					
	Criminal Justice, PhD	Program will emphasize the relationship between theory and practice, as well as the interconnected activities of the many agencies and professions involved in the systems of justice and private security. Graduates can contribute to the development of research-supported, improved systems for the prevention and control of crime and delinquency.	2022	No additional cost	None
l	East Asian Studies, BA	This program will provide students with language development, cultural enrichment and a broad understanding of Asian language, culture, society and economy.	2022	No additional cost	None

Unit	New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Liberal Arts					
	Global Studies, BA	Interdisciplinary degree program encompassing global political economy and international studies; global governance, human rights, social justice, and civil society; global cross-cultural studies, linguistics, philosophy, religion, and arts; global diversity and intersectionality—class, race, and gender studies on a global scale.	2022	No additional cost	None
	Justice Studies, BA	Focused on Justice Studies housed in Criminal Justice Department; interdisciplinary program incorporating courses from Criminal Justice and other disciplines such as History, Political Science, Philosophy, etc.	2021	No additional cost	None
Medicine					
	Clinical Laboratory Science Program	New master's program through Department of Pathology and Laboratory Medicine (School of Medicine): This program will address critical workforce needs in the state of Nevada and will leverage UNR Med's community hospital partnerships and the expertise of our on-campus Nevada State Health Lab.	July 2023	Will require hiring 2 or more additional faculty plus administrative costs (\$300,000/year)	Self-funded
	Pharmacology, BS	New undergraduate program through Department of Microbiology (School of Medicine): This program will leverage the teaching and research strengths of the Microbiology faculty. There may be opportunities for community college partners.	August 2022	Will require hiring 2 or more additional faculty plus administrative costs (\$280,000/year)	None identified

The process for approving new programs at the University of Nevada, Reno includes a pre-screening process to review the program in terms of available resources, program viability, and connection to University or NSHE strategic plans and goals. If approved, a detailed proposal is prepared and is reviewed by relevant college and department committees, the University Courses and Curricula (UCC) Committee, and, if a graduate program, by the Graduate Council. Once a new program proposal has been reviewed and approved at all appropriate levels, it is brought to the NSHE Academic Affairs Council and the Board of Regents' Academic, Research, and Student Affairs Committee for approval. The institution's accrediting body, the Northwest Commission on Colleges and Universities, also receives the University's application for approval of any new degree and certificate programs in order to approve the change as minor or substantive.

Undergraduate Success Programs

The University of Nevada, Reno has a number of initiatives to increase retention, graduation rates, and student success following graduation. New professional academic advisor positions have been added to decrease the student:advisor ratio to 350:1 a national standard that was identified as an institutional goal several years ago and adopted by the Board of Regents as a NSHE goal in January of 2019.

The University is a member of the Student Success Collaborative (SSC) of the Education Advisory Board, and has invested in their SSC Campus analytics system – Navigate -to track student progression, identify and reach out to at risk students, and to coordinate advising notes and utilization of academic support centers. Colleges and schools have developed "campaigns" to identify at-risk students in every academic major for each of the first four semesters.

UNR is a member of the Western Land-Grant Cluster as part of APLU's "Powered by Publics" student-success initiative. A significant outcome of this initiative is the use of "Curricular Analytics", a sophisticated software that analyzes 4-year degree programs and provides useful analytics for evaluating the complexity of degree programs. UNR has applied Curricular Analytics to each of its undergraduate degree programs and is in the process of making modifications that facilitate timely degree completion while maintaining the academic integrity of degree programs.

A variety of support units facilitate student success, such as: tutoring centers, Office of International Students and Scholars, Upward Bound, First in the Pack, TRiO programs, Counseling Services, Financial Aid, and The Center: Every Student, Every Story.

The University has continued to expand the NevadaFIT academic boot-camp program for first-year students, which takes place the week before school starts. Students earn one-credit for participating in this rigorous program, which helps equip students for success in college. The program has grown steadily over the past 7 years with 48 students in 2013, 352 students in 2014, 410 in 2015, 973 students in 2016, 1,345 students in 2017, 1,620 in 2018, and 2,535 in 2019 (72% of the freshmen class). Each college and school has its own unique version of NevadaFIT. We were not able to conduct NevadaFIT in the Fall of 2020 because of the pandemic. However, we were planning that all incoming freshmen would be required to participate in NevadaFIT and will resume that plan with the Fall 2021 freshman cohort. NevadaFIT continues to have a notable impact on student retention and graduation rates. For example, fall-fall retention of NevadaFIT participants is 84% compared to 78% for non-participants. The 4-year graduation rate of the 2016 cohort of NevadaFIT participants was 47.1% compared to 38.6% for non-participants. The program particularly impacts first-generation students, minority students, and low-income students. For example, approximately 37% of NevadaFIT participants are first-generation students, and the 4-year graduation rate of NevadaFIT participants was 41.4% compared to 33.0% for non-participants. The 4year graduation rate of Black NevadaFIT participants was 51.7% compared to 40% for nonparticipants and for Hispanic students the graduation rate was 41.8% compared 32.9% for nonparticipants.

Beginning in 2016 UNR has been providing the ACUE (Association of College and University Educators) course on best practices in pedagogy. All new, full-time instructional faculty (tenuretrack and non-tenure-track) are required to take this year-long course and senior faculty are encouraged to take the course. Approximately 75 faculty per year take the course as do approximately 25 graduate students in doctoral programs.

In Fall 2016 the University launched its new Silver Core general education program. This program is founded upon the assessment of student learning in fourteen Core Objectives developed by UNR faculty. The objectives include focus areas on experiential learning, ethics, technology, globalization, and communications skills. By design, the Core Objectives are integrated into the requirements of degree programs whenever possible. Courses satisfying Core Objectives are being assessed on a five-year cycle based on discipline. Initial assessments of student-learning outcomes will be used to refine and direct the design of the Silver Core, which is a dynamically evolving general-education program. In addition to assessing student learning within Core courses, UNR faculty also continue to engage in the refining of the Silver Core by:

- Aligning the expectations for development of Core Objective 1 (Composition and Communication) beyond general education with President Johnson's Composition and Communication initiative, providing enhanced instruction in composition and communication in the disciplines.
- Aligning student learning outcomes within general education courses with the Interstate Passport block-transfer system.
- Expanding upon the diversity-and-equity objective (CO 10) by developing more courses that address contemporary issues of diversity, equity, and inclusion (DEI) while promoting the incorporation of meaningful DEI content in courses across the curriculum.

Graduate School

The University of Nevada, Reno is vigorously pursuing policies to improve the graduate student experience, expand graduate program offerings, and substantially increase the number, diversity and career preparedness of its graduate students. Since 2013, UNR has increased the base stipend for doctoral graduate assistants (GA) by 36% and added 135 state-funded GA lines, with additional GA lines anticipated as UNR has substantially increased the number of tenure-track faculty between 2014 and 2020. In order to be competitive with regional R1 and R2 universities in STEM disciplines, in FY19, UNR increased the base graduate assistant stipend for STEM doctoral students to \$19,000, and differentiated base stipend amounts by degree type and field of study (STEM Doctoral > Social Sciences/Professional Doctoral > Humanities Doctoral > Master's). UNR is investing in centralized digital recruitment campaigns, the GradFIT recruitment boot camp for first-generation and underrepresented students, the Gradventure campus visitation program, and the Graduate Dean's Awards, a generous fellowship and merit scholarship program. The Graduate School has also invested in new TargetX application software to enable state-of-the-art application submission via mobile devices. In 2016, UNR established fully online master's programs in Social Work and Public Health. These new online master's programs already enroll more than 500 students and provide rural Nevada communities with access to graduate degree programs. Despite the COVID-19 pandemic, efforts to enhance graduate education are continuing to yield positive results, including a 5.2% increase in total graduate student enrollment between Fall 2019 and Fall 2020.

UNR and the Graduate School are engaging in a several initiatives to improve graduate student success and raise the profile of graduate education on campus. In 2014, the Graduate School introduced the Three Minute Thesis @ Nevada competition and augmented funding for graduate student conference and meeting travel by \$100,000. UNR is also greatly expanding graduate program offerings in cutting-edge scientific fields and professional programs aimed at supporting Nevada's infrastructure and economy. Recently established graduate programs include the interdisciplinary Integrative Neuroscience MS and PhD programs, the Mathematics PhD program, the Statistics and Data Science PhD program, the MS and PhD programs in Animal and Range

Science, the Doctor of Musical Arts program, the PhD in Business Administration, the MA in Communication Studies and the Master of Physician Assistant Program, as well as fully online master's programs in Accountancy, Business Analytics, Cybersecurity, Social Work and Public Health. Forthcoming programs include a PhD in Engineering Education and a PhD in Natural Resources and Environmental Sciences.

The Graduate School is also greatly expanding professional development services to enhance graduate education, career attainment and postdoctoral fellow training. In 2015, UNR became a sustaining member of the National Postdoctoral Association and established the Office of Postdoctoral Affairs, whose mission is to enhance postdoctoral experience and training by providing postdoctoral fellows, faculty, and administrators with information regarding institutional policies, career development opportunities, and other issues relevant to postdoctoral mentoring. In partnership with the Graduate Student Association (GSA), in 2016-17 the Graduate School developed a Professional and Career Development Series that includes workshops and seminars on topics such as grant writing and fellowships, interviewing skills, and motivation and personal growth. Implementation of this program has resulted in a more than five-fold increase in the number of National Science Foundation (NSF) Graduate Research Fellowships being awarded annually to UNR students. Studies by the NSF, the National Institutes of Health and other governmental agencies have established that centralized professional development efforts aid in the recruitment of new students, provide an important tool for expanding diversity efforts, contribute to stronger academy-industry engagement, and can lead to enhanced interdisciplinary collaborations. In Fall 2018, the Graduate School embarked on two major initiatives to enhance training of graduate teaching assistants (GTAs), improve workforce development and promote degree completion. First, the Graduate School partnered with the Association of College and University Educators (ACUE) to offer a 4-credit graduate course series in Effective Teaching Practices for GTAs. Successful completion of the course provides GTAs with a nationally-recognized Certificate in Effective College Instruction endorsed by the American Council on Education (ACE). Second, to increase the computational literacy and research productivity of UNR's graduate students, the Graduate School worked in collaboration with faculty across campus to develop an interdisciplinary course in research computing (GRAD 778). And, finally, each year the Graduate School sponsors a team of UNR faculty to attend an intensive mentor training workshop at the University of Wisconsin, Madison through the National Research Mentoring Network (NRMN). Under guidance from the Graduate School, these faculty lead a series of workshops for graduate faculty in evidence-based mentoring practices.

<u>University of Nevada, Reno School of Medicine (UNR Med):</u>

- The Division of Health Sciences has been functionally dissolved with the launch of the Schools of Nursing, Community Health Sciences and Social Work as independent schools led by deans reporting to the Provost.
- Other components of DHS, including the Sanford Center on Aging, Center for the Application of Substance Abuse Technologies (CASAT), the Student Health Center, and the Department of Speech Pathology and Audiology have been realigned with the School of Medicine, or, in the case of CASAT, with the School of Community Health Sciences.
- Following the launch of independent schools representing a range of health professions, as well as the successful creation of the Physician Assistant Studies Program, the intent now is to create a new consortium of Health Sciences disciplines and leaders to develop collaborative

Student Services

The following table summarizes the new UNR student services plans to implement in the period 2021-2025:

Brief Description of New/ Expanding Student Services	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
First In the Pack program expansion	2021	\$1 million	Soft funds
Housing Grants for Pell students	2021	\$20,000	Auxiliary
Campus Labs Student Services Platform	2021	\$75,000	Donor/Fees
Black Cultural Identity Residence Floor	2021	\$15,000	Auxiliary
Transfer Student Mentor Program	2021	\$25,000	Soft funds

Research and Innovation Initiatives

The vision of Research & Innovation (R&I) is that the University of Nevada, Reno will be a global leader in developing solutions to state, national and international grand challenges through excellence in fundamental, applied and translational research, scholarship and innovation.

The **mission** of the research and innovation enterprise at the University is to:

- Enhance the status of the University as an internationally recognized, high impact research university.
- Support world-class research, discovery innovation, and commercialization.
- Provide high quality service and competitive infrastructure to enable faculty and students to excel in their research, scholarly and creative endeavors, and entrepreneurial activities.
- Minimize the research administrative burden on faculty.
- Provide a safe work environment, foster ethical conduct, and adhere to regulatory requirements.

The mission of R&I's activities is aligned with the goals of the University's Institutional Strategic Plan and with the needs of the region and the state.

R&I supports the university-wide goal to attain the Research University R1 classification by 2023 by adopting the following actions:

- Support world-class research, innovation and commercialization
- Develop major existing and emerging research areas
- Provide highest quality services and competitive infrastructure that will enable faculty, students and staff to excel in their research, scholarly and creative endeavors
- Minimize administrative burden on faculty
- Provide a safe work environment
- Foster ethical conduct and adhere to regulatory requirements

The activities of R&I will be driven by our core values: integrity, the pursuit of excellence, fairness, respect, and collaboration.

R&I aims to provide the University faculty with streamlined, organized, and efficient access to all information and processes necessary to conduct research, scholarly and creative activities and facilitate innovation and entrepreneurship at the University.

Structure of Research & Innovation division:

- Research & Innovation is a faculty-first service organization; it will adopt the "Anticipate, Communicate, Train" (ACT) approach.
- Research & Innovation is finalized the 2020-2025 Strategic Plan that is aligned with the University's Strategic Plan.
- Dr. Ahmad Itani, Professor of Civil Engineering at the University of Nevada, Reno, was appointed as the Associate Vice President for Research in June 2019. He supports faculty research development, and oversees the core facilities and Undergraduate Research.
- A national search for the Assistant Vice President for Enterprise and Commercialization was conducted in 2015. Dr. Ellen Purpus was selected, and she has been in the office since October 2015. She oversees Enterprise & Commercialization activities (formerly Technology Transfer), the Innevation Center, Nevada Industry Excellence, and Nevada Center for Applied Research (NCAR).
- A national search for the Director, Innevation Center was conducted. Dr. Grace Chou was selected for that role since April 2016.
- A national search was conducted for the Director, Nevada Center for Applied Center (NCAR). Dr. Carlos Cardillo was selected, and he has been serving in that role since November 2015. NCAR is a stand-alone research and development center that leverages the University's physical (laboratories) and intellectual (faculty, staff and students) assets to enhance the competitiveness of Nevada's industry.
- A Research and Proposal Development Services unit has been established. Ms. Carrie Busha was selected manager to lead the team through a national search.
- The Director for Undergraduate Research was recruited. Dr. Tanya Kelly joined R&I as the Director on January 1, 2020.
- The institutional repository was established in collaboration with the library. Mr. Rohit Patil was hired to lead to manage Scholarworks.
- The Nevada Research and Innovation Corporation (NVRIC) was incorporated in August 2016.
- The Southside Studio was established in the Southside School building that was leased for a 5year period from the City of Reno. This provides expanded facilities for Innevation Center operations and also affords the establishment of a Community Robotics program in collaboration with Tesla.
- R&I aims to create and foster an environment that will enable innovation among faculty, staff and students.
- R&I aims to invest in electronic software to manage and organize business transactions related to research – pre- and post-award, IRB, conflict of interest.

Implement programs to enhance faculty competitiveness

- Competitive proposal development initiatives
 - a) Grant-writing seminars and workshops and faculty writing groups.
 - b) Proposal development assistance (budget development, external reviews of proposals, editorial assistance, graphic design assistance).
 - c) Implement a Grant-writing Mentors Program for junior faculty.
 - d) Building relationships with regional companies/industry partnering on large funding

- opportunities.
- e) Research Enhancement Grants as a competitive program to enable re-submission of fundable proposals after initial rejection.
- f) Seed funding mechanisms to support scholarly, creative and artistic activities, such as the Faculty Research Travel Grants program for CLA and Journalism.
- g) Establish other internal research funding mechanisms.
- h) The Research and Proposal Development services unit was fully staffed, for now, to facilitate development of large multi-institutional, multi-faculty and interdisciplinary proposals. The team is comprised of the unit lead (Carrie Busha), Proposal editor (Kate Dunkelberger), budgetdevelopment personnel from Sponsored Projects. Graphic design is provided through outside experts.

Enhance research infrastructure

- a) Equipment grants to be competitively awarded to faculty for enhancing instruction and research.
- b) Support equipment grant applications, such as NSF Major Research Instrumentation, Defense University Research Instrumentation Program, etc.
- c) Enhance the Shared Research Facilities through strategic equipment purchases and optimization of the research space.
- d) Hired an IT/software development person in R&I. Software was developed for the distribution of F&A to departments and principle investigators to reduce the burden on the dean's offices in the future, additional programming will continue to provide both historical and current reports.
- e) A partnership with Renown Health, established in January 2017) will provide unprecedented access to University faculty for fMRI (functional Magnetic Resonance Imaging) research related to brain research.
- f) Established the high-performance computing (HPC) facility, Pronghorn. The partnership with Switch has enabled the University to continue expansion of Pronghorn – the partnership provides the University with significant amount of space, cooling, power and security; all of the essential elements of a world-class HPC.
- g) Established Advanced Imaging Core and Forest and Wildlife Area, and continue to enhance the capabilities of the existing core labs – Genomics, Proteomics, Bioinformatics and HPC. Currently, upgrading equipment in the Genomics and Proteomics core labs.

R&I Policies and Procedures

- a) Streamlined existing policies and develop new policies that promote research and ethical conduct of research on campus.
- b) Established a Terminal Leave Benefit pool to reduce the financial burden on principle investigator, department and dean when a grant funded employee separates from the university.
- c) UNR Med Renown Partnership
 - i. Help establish clinical trials program within the partnership between UNR Med and Renown.
- Research Integrity Office- Streamlining procedures and processes
 - Strengthen and expand training opportunities on Responsible Conduct of Research
- Animal Resources Streamlining procedures and processes
 - Prepare for the AAALAC International re-accreditation.

- Environmental Health & Safety Streamlining procedures and processes
 - Developed online and in person training modules that re-enforces safety on campus such as the Safety Training for Academic Researchers (STAR) Lab.

Research Communications

- Continue changes/improvements to the R&I website
 - Making all documents accessible
- Enhance the Industry Portal on the R&I website

Enhance Innovation and Commercialization Opportunities on Campus and in the Region

- Spur the growth and outreach activities of University of Nevada, Reno Innevation Center, Powered by Switch.
- Hire support personnel in the Office of Enterprise and Innovation.
- Established three Innovation Awards--Early Career Innovator, Innovator, Student Innovator.
- Established a Bio-Sciences Entrepreneurial Laboratory (BEL) to draw bio-tech industry to establish programs on campus and collaborate with UNR faculty to seek federal research and development funding. Starting a second BEL owing to the first-one being at capacity within 15 months of its opening.
- Significantly increase number of start-ups and spin-out companies on-campus and in the region.
- Support the innovation spaces (such as the DeLaMare Library and the Innevation Center Makerspace) and other entrepreneurial resources on campus for students, faculty, staff, and community.
- Strengthen the technology licensing pipeline to increase the number of faculty innovations developed into products to benefit society.
- Establish a robust support system for faculty (and student) entrepreneurs.
- Enhance efforts to inform faculty about how to protect and commercialize research discoveries and innovations.
- Work with the non-profit Nevada Research and Innovation Corporation to boost commercialization efforts.

Other Research Initiatives

- Enhance interdisciplinary research and graduate teaching programs Collaboratively with the Graduate School.
- Clarify policies for creation of Centers and Institutes. Establish world-class faculty- driven research centers and institutes.
- Streamline the F&A recovery distribution between centers, colleges and departments.
- Foster International research programs.
- Established 'Dimensions' Research enhancement program in College of Liberal Arts and School of Journalism.
- Enhanced the Faculty Travel Grants Competitive and in three phases.
- Support and enhance Undergraduate Research.
- Establish international undergraduate research programs.



Nevada State College

Strategic Objectives

Nevada State College (NSC) is dedicated to providing high-quality educational opportunities through baccalaureate and targeted Masters programs that open the door to career success and an enhanced quality of life for a promising population of students, including many from first-generation and historically under-served backgrounds. To this end, the College emphasizes superb instruction, excellent academic programs, exemplary student support, and innovation as a means to more efficient, effective outcomes in all corners of the campus. Ultimately, the college aspires to promote the educational, social, cultural, economic, and civic well-being of both the citizens and State of Nevada.

The college strives to fulfill its mission by maximizing the quality and accessibility of a baccalaureate and Masters education. To address the former, NSC offers a learning experience characterized by personal attention, advanced technology, and exceptional teaching practices. To address the latter, NSC strives to maintain a comparatively low cost of education while meeting the diverse needs of our student population through student-centered degree pathways, robust academic support, and engaging student life opportunities.

The following strategic objectives guide the pursuit and implementation of mission-specific goals for 2021-2025:

- 1. Increase student retention, degree completion, and overall academic success, particularly among first-generation, under-represented students by improving comprehensive academic resources, first-year experience and summer bridge initiatives, academic support programs, peer support initiatives, and overall student quality of life.
- 2. Expand the enrollment of students from targeted populations through strategic, evidence-based recruitment and marketing, as well as enhanced relationships with all relevant communities, including area high schools and NSHE's two-year colleges.
- 3. Increase the activities, resources, and physical space needed to foster a more engaging student and residential life experience on campus.

- Continue to develop and enhance academic programs that offer distinctive, high-quality learning experiences to students.
- Continue to build the campus data infrastructure to enhance our reliance on assessment and evidence to drive institutional improvement, enhancements in customer service, and innovation.
- Expand our efforts to integrate technology into our processes to enhance quality and maximize efficiency, particularly for underlying structures that support student success (e.g., degree pathways, E-Alerts) and institutional business processes.
- Continue to develop innovative partnerships between academic and student affairs that facilitate student-centered practices and provide students with the integrated, structured support needed to achieve their goals and meet our expectations.
- Introduce dependable and data-driven degree pathways that help facilitate the timely progression of students from the first day of enrollment - including that which occurs at community colleges – to the attainment of a degree at NSC.
- In accordance with our statewide mission, establish strong partnerships and articulation agreements with incentives for students who have earned an associate's degree.
- 10. Maintain affordability and administrative efficiency to ensure that students are able to afford a high-quality college degree from NSC.
- Expand extramural funding to support the success of first-generation and under-represented students, enhance degree programs, and facilitate greater experiential/research opportunities.
- 12. Redesign remedial placement practices and associated gateway courses to facilitate student skill-acquisition while simultaneously decreasing costs and time to completion.
- 13. Prepare students to serve and lead Nevada's workforce by fostering essential knowledge and skills through exemplary instructional practices, cutting-edge technology, research or projectbased curricula, and enhanced faculty and staff development initiatives.
- 14. Create and strengthen partnerships that provide a synergistic and interdependent relationship with the Southern Nevada community, particularly in the creation of a workforce-centered internship program and the development of public-private ventures that leverage the usage of our land.
- 15. Foster, model and disseminate institutional best practices that contribute to a broader understanding of teaching excellence and student success in higher education, particularly in support of historically under-served student populations (e.g., first-generation students).
- 16. Enhance our Hispanic Serving Institution status (HSI) by cultivating the learning experiences, support structures, and resources to promote student success.
- 17. Develop self-sustaining workforce development and continuing education programs that meet critical community needs.

Academic Programs

Beginning from a commitment to our mission and core values, and guided by data on career prospects, educational market saturation, and student interest, NSC has prioritized the introduction of the following new academic programs and initiatives over the next four years. A commitment to the quality and health of existing programs, in accordance with projected resources, as well as strategic planning for the future of the institution strongly influenced the selection of new programs and initiatives.

New Program Name/Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
BS in Chemistry	Pursuing an American Chemistry Society certified Chemistry BS	Fall 2022	Costs are estimated as a gradual annual increase from 2020-2026, expected to total \$547,200 at end of those 6 years. \$14,500/year equipment maintenance thereafter.	None
BA in Digital Music	This program embraces contemporary music production in a way not reflected in traditional programs. Students will learn digital music production, including composing, orchestration, and style; recording techniques; and scoring for media productions.	Fall 2022	One TT faculty \$60,000 + fringe; \$7500 for keyboards and software	Private donors have expressed interest in supporting a music program
BA in Healthcare Administration/Medical Office Management	A degree in healthcare administration and medical office management that addresses a growing need in the region and provides another viable pathway for erstwhile pre-nursing students	Fall 2022	One FT faculty at \$70,000 + fringe	None
BA in Sociology	The Las Vegas Valley is a rapidly changing and unique metropolitan area. The creation of a major in Sociology will better able NSC to help our students make sense of the world around them and their place in it. SOC B.A. would also serve to complement NSC's robust Psychology program and Communication major	Fall 2024	One new tenure-track faculty hire \$65,000 + fringe	TBD. The potential for outside funding is being explored
Master's in Nursing: Generalist with specialty tracks that meet market demands	There is increased demand for nurses with an advanced education to meet the needs of hospitals, clinics, and other healthcare settings throughout the state. A generalist approach allows students to complete an MSN with specialty tracks that meet market demands	Summer or Fall 2023	Three new nursing faculty (doctoral Prepared/tenure track) \$100,000 + fringe per faculty	TBD. The potential for outside funding is being explored

New Program Name/Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
Master's in School Psychology	This new graduate level program, slated to be nationally accredited, is envisioned to be a collaborative partnership with the Clark County School District. This program will address an identified critical need for the State of Nevada. The ratio of School Psychologists to students in CCSD is 1:2,300.	Fall 2023	The Initial Build out will require hiring two new members in our SOE. It is assumed that additional staffing support will come via building a strong partnership with NSC's Psychology Faculty. \$200,000	There is external grant funding potential. In the Fall 2020, for example, the State of Nevada received a substantial multiyear grant focused on building a more robust pipeline for school-based mental health professionals – including school psychologists
Master of Arts in Teacher Education (Specific Emphasis in one of three tracks: Curriculum and Instruction, STEM, Multilingual/ Multicultural Education	In addition to providing a graduate level pathway to initial teacher licensure for participants in CCSD's ALTA program, this Master's in Teacher Education will focus on three key areas of need in Southern Nevada: Teacher retention, teacher leadership and teacher mentorship. Initial pilot will focus on three key shortage areas: Curriculum and Instruction (with a Critical Literacy emphasis), STEM, and Multilingual/Multicultural Education.	2023-2025	Funding for curriculum development on behalf of current NSC faculty ill include release time estimated cost of \$20,000. One new full-time Assistant Professor in the content area of emphasis \$70,000.00. In addition to Marketing and recruitment, \$10,000. Thus a total estimated cost of \$100,000.00	TBD

Student Services

During the next four years (2021-25), Nevada State College will expand upon and/or introduce the following student service initiatives.

	escription of New/ ng Student Services	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
	ity of dual credit program with new s, increased enrollments, and improvements.	2021-2023	\$135,000	None
NSC while maintaining a development and acade include a Director of Wel	Residential Experience e scope of student life experiences at commitment to personal mic integration. New personnel llness, a Conduct Officer, a Student Administrative Assistant.	2021-2023	Operating costs of approximately \$50,000 Hire a Director of Wellness, Compliance Officer, Manager of Student Life, and Administrative Assistant \$298,000 + fringe	Options are being explored with College Advancement

Brief Description of New/ Expanding Student Services	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Improve Transfer Programs & Enrollment Establish new transfer initiatives – including dual admissions programs and NSC courses taught on community college campuses – and enhance advising presence at transfer institutions to increase enrollment numbers	2021-2023	Coordinator of Southern Nevada Programs and Transfer Advisor \$95,000 + fringe	Enhancement funds will provide initial support
Comprehensive Advising & Mentorship Implement comprehensive 4-year student advising that eschews our o-60 credit advising model and provides students with professional advising at the Academic Advising Center from o credits to degree completion. Complement this effort with faculty mentorship that also runs from the freshman year to graduation. Expense covers three new advisors.	2021	Three new advisors \$40,000 + fringe per advisor; assistant director of advising at \$58,000 + fringe	Student fees
Enhanced New Student Transfer Orientation Develop a transfer-focused orientation to complement our recently overhauled new freshman student orientation, with a particular focus on the providing resources, information, and community-building that will facilitate the success of transfer students.	2022	\$15,000	Orientation fee
Increased Success of African American Students Implement initiatives designed to promote enhanced learning and graduation rates of African American students, including the Sankofa program, an HBCU exchange program for students and faculty, and an NSC chapter of Collegiate 100.	2021-2022	\$70,000 for programming/ operations	Rogers Foundation (partial support)
Outcomes Assessment & Core Curriculum Support Strengthen outcomes assessment process, improve implementation of recommendations, and work with faculty/deans to establish greater quality and consistency in the core curriculum; expense covers CTLE position.	2021	\$65,000	None
Increased utilization of academic support Increase utilization of academic support in advising, the Writing Center, and the Academic Success Center, particularly in the freshman year; expand virtual and on- demand academic assistance opportunities.	2021-2023	ASC Student Success Manager \$52,000 + fringe	Student fees
Expanded Student Wellness Support Expand health and wellness services by collaborating with existing SoN partners and added an FQHC partner. Add telemedicine service.	2021-2022	Director of Health and Wellness (cost is noted above in "Expanded Student Life" initiative) Full-time Mental Health Counselor/Title IX \$80,200 + fringe	None
First-Year Experience Continue to develop an engaging first-year experience that promotes student retention and long-term academic success; expense covers three additional FYE lecturers and a director or faculty lead * Requested funding is not final and awaits further review	2021-2024 W	Three lecturers \$42,000 + fringe per lecturer Director or faculty lead \$9,000-\$60000 + fringe	None

Brief Description of New/ Expanding Student Services	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Enhanced Data-Driven Decision-Making Improve capacity to collect, analyze, and effectively report data; expand staffing to enhance IR Director's ability to contribute to strategic enrollment management	2021-2022	IR Reporting Analyst \$55k + fringe	None
International Program Development Develop capacity to implement and maintain international programs; expense covers registrar staff with specialization in this area.	2021	\$40,000 + fringe	None
STEM Teachers Secure funding and develop programming to increase STEM teachers in Nevada.	2021	\$200,000	Federal grant funding (Noyce, NSF)
Career Services Center Support career services center to engage students in more community opportunities and internships.	2021-2023	\$55,000	Student fees
Teacher Academies Expand Teacher Academies in the High Schools through dual credit offerings to address Nevada's teacher shortage and create a pipeline for high performing secondary students to enroll in NSC's School of Education and enter teaching careers.	2021-2023	\$80,000 The recent award of 2 nd HSI grant – the largest grant in NSC history – provides precious additional resources to support the BOLD expansion of our TAPP initiative.	Private funding
Daycare Expand child-care options for students and faculty. Increase community partnerships that provide affordable childcare options. Add a permanent space on campus with dedicated childcare.	2021-2025	\$300-600,000* The Glenn and Ande Christenson Building, set to open in the summer 2021 includes an Early Childhood Education Center. Our campus is working to identify state funds to pay the costs for staff.	Private funding The SOE has met with the NSC Foundation Team on more than one occasion. There continues to be a great "giving" opportunity for a private donor(s); securing private funds would be a tremendous boost.
Structure courses and curricula to imbue students with functional and marketable skills that promote opportunities for career, graduate school, and personal success.	2021	\$48,000 (Summer Institute for faculty)	Private funding

^{*} Requested funding is not final and awaits further review



College of Southern Nevada

Strategic Objectives

CSN Mission Statement

The College of Southern Nevada empowers our students and communities to achieve, succeed, and prosper.

CSN Vision

The College of Southern Nevada is recognized as a leader among community colleges in fostering student success, shared governance, and performance excellence.

CSN Values

I-LEAD

Integrity

We place fairness, honesty, transparency, and trust at the center of all decisions, policies, and operations.

Lifelong Learning

We foster curious minds, continuous learning, and a broad-based education to enhance creative thinking, problem solving, innovation, and principled leadership.

Excellence

We achieve and surpass our goals through continuous performance improvement and commitment to — and quality in — teaching, learning, scholarship, service, and administration.

Academic Freedom

We embrace freedom of thought and speech in support of teaching, learning, communication, shared governance, and responsible civic engagement.

Diversity

We value the integration of different backgrounds and perspectives among students, faculty, staff, and community members as a way to collaborate and promote creativity, innovation, and growth.

CSN recently adopted our new 2019-2024 strategic plan, which include the following strategic goals and objectives:

1. Student Success

Provide the best environment, programs, and support services to meet students' personal, work, and educational needs and expectations. Close the achievement gap among underserved student populations. Improve completions and student success rates and increase the number of individuals with a post-secondary credential.

Objectives:

- 1.1 Improve graduation and transfer rates year-over-year.
- 1.2 Implement and enhance Connection, Entry, Progress and Completion (First Year Experience) model for student

services and the collegiate experience, ensuring that students connect to the College and to pathways for completion.

- 1.3 Increase the percentage of students with a degree plan year-over-year.
- 1.4 Increase the number of students taking a full-time course load in the fall and spring semesters.
- 1.5 Increase the number of students who utilize the support services that result in student retention, persistence, and

completion.

1.6 Ensure students achieve Institutional Learning Outcomes (ILOs) to promote lifelong learning.

2. Engagement

Provide an inclusive and diverse environment that fosters lasting connection, shared investment, pride and goodwill. Communicate, connect with and support students to increase new student enrollments, student engagement, and satisfaction with CSN's family, culture, programs, and services.

Objectives:

- 2.1 Improve outreach to cultivate community relationships.
- 2.2 Increase the number of participants engaging in preparation activities for college.
- 2.3 Promote CSN shared identity and pride.

- 2.4 Create a culture in which CSN values diversity, inclusion and respect for others in every College service, event, and operation.
- 2.5 Improve service experience for students.

3. Performance and Quality

Engage in best performance excellence practices that lead to the deployment of our values, accomplishment of our mission, and realization of our vision. Review and improve academic and work processes, ensure two-way communication and collaboration across campuses, and promote institutional innovation. Research critical real-world problems and seek solutions and stewardship to ensure performance excellence and the increase of quality and value to CSN stakeholders.

Objectives:

- 3.1 Embed continuous improvement and innovation into all aspects of the College.
- 3.2 Pursue specialized accreditations.
- 3.3 Recruit, hire, and retain diverse qualified employees.
- 3.4 Enhance professional development opportunities for employee growth and enrichment.
- 3.5 Improve shared governance and coordination.
- 3.6 Develop opportunities for faculty and students to engage in undergraduate research.
- 3.7 Evaluate degree and certificate programs and services.

4. Workforce and Community

Collaboratively address the challenges of the workforce and industry education needs of Nevada populations. Address critical issues facing 21st century Nevada. Consider environmental, social, and fiscal impact of every decision to use resources ethically, effectively and sustainably.

Objectives:

- 4.1 Promote transparency of strategic goals through published institutional data and analytic results.
- 4.2 Improve fiscal responsibility, sustainability and resource allocation to assure mission alignment.
- 4.3 Diversify institutional revenue streams.
- 4.4 Reduce energy consumption.
- 4.5 Ensure alignment with the workforce and economic development ecosystem to meet employment demand and skill gaps.

Academic Programs

This academic master plan supports CSN's strategic objective of student success, engagement, performance and quality, and workforce and community.

New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
Computer Science – Associate of Arts (AA)	Focuses on computer theory, computing problems and solutions, and the design of computer systems and user interfaces from a scientific perspective. Includes instruction in the principles of computational science, computer development and programming, and applications to a variety of end-use situations. This program is intended as a transfer degree for entry into the universities' Bachelor of Science degree in Computer Science.	Fall 2021	All coursework to present this program currently exists in the CSN catalog. CS, CPE, and IS courses will be employed. Current facilities and equipment will suffice for this program. One additional faculty position is required.	None
Graphic Communication: Industrial Design – Associate of Applied Science (AAS)	Prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences via the creation of effective forms, shapes, and packaging for manufactured products. Includes instruction in designing in a wide variety of plastic and digital media, prototype construction, design development and refinement, principles of cost saving, and product structure and performance criteria relevant to aesthetic design parameters. No similar programs exist in NSHE. Is an ideal feeder program for the CSN BAS in Project Management.	Fall 2022	Negligible. Almost all coursework to present this program currently exists in the CSN catalog. GRC, MT, and ET courses will be employed. Current studio facilities and equipment will suffice for this program.	None
Engineering Tech- Avionics – Associate of Applied Science (AAS)	Prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of aircraft operating, control, and electronic systems. Includes instruction in flight instrumentation, aircraft communications and homing systems, radar and other sensory systems, navigation aids, and specialized systems for various types of civilian and military aircraft. This program addresses a direct industry need not currently available at any other NSHE institution.	Fall 2022	Almost all coursework to present this program currently exists in the CSN catalog. ET, AV, and other current courses will be employed. Estimated that two courses in aircraft instrumentation may need to be developed with purchase of trainer/simulators. Current classroom facilities and equipment will suffice for most of this program.	None

New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
Construction Management: Building Inspection – Associate of Applied Science (AAS)	Prepares individuals to apply industrial, labor, and governmental standards and laws to the oversight of construction projects and the maintenance of completed buildings and other structures. Includes instruction in construction processes and techniques, materials analysis, occupational safety and health, industry standards, building codes and specifications, blueprint interpretation, testing equipment and procedures, communication skills, accident investigation, and documentation. This program addresses a direct industry need currently under discussion within NSHE.	Fall 2022	Negligible. Almost all coursework to present this program currently exists in the CSN catalog. CONS, BI, and other current courses will be employed. Current classroom facilities and equipment will suffice for this program.	None
Financial Services – Bachelor of Applied Science (BAS)	The BAS in Financial Services prepares students for licensing exams and careers in a multitude of investment and risk management fields including banking, insurance, and retirement planning, etc.	Fall 2022	We can initiate this program with current resources.	None
Global Studies – Bachelor of Applied Science (BAS)	Global Studies is interdisciplinary and involves exploring social problems that cross international, national, state, and local boundaries to develop policy solutions. Examples include terrorism, human trafficking, global energy and environmental conservation.	Fall 2022	Current equipment, facilities and faculty are sufficient to establish this program.	None
Environmental Conservation – Bachelor of Applied Science (BAS)	Focuses on technician level environmental conservation skills within the environmental consulting industry. Instills basic skills, abilities concerning the Endangered Species Act, National Environmental Policy Act, USFWS, NPS, USGS, species handling, quality control protocols, and competence in support of consulting operations and management within Nevada and the region.An industry advisory committee has been established with letters of support provided.	Fall 2022	Current equipment is sufficient to establish the program. Current full-time instructors are qualified to teach upper-division coursework. One or more qualified part-time instructors would be hired for selected courses and come from industry. Estimate maximum of 7 upper-division classes taught by part-time faculty per semester. Full-time faculty can teach upper-division courses as overload. Each 3-credit, upper-division class is taught at 1.25 IU/credit. Up to 15 credits/semester x 1.25 IU/credit x \$875/IU x 2 semesters = \$18,562.50 Total per year (maximum): \$32,812.50	NV Workforce STEM Grant and Perkins can be used to purchase additional equipment. However, these grants are not required.

New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
Funeral Service and Mortuary Science – Associate of Applied Science (AAS)	Program addresses many of the components of CSN's mission statement and conforms to the mission by providing workers with the technical skills needed to compete and succeed in today's industrial workforce. This new degree would offer academic and vocational instruction in Funeral Service and Mortuary Science (FUNS) to students, as well as bring expanded employment opportunities to Southern Nevada, as well as throughout the state, in the funeral service industry. CSN is not duplicating any NSHE program. There are currently no Funeral Service or Mortuary Science Programs offered at any of our NSHE Institutions. Nor are there any such programs offered at any of Nevada's private, forprofit higher education institutions. The closest FUNS programs are in California, Arizona and Utah.	Fall 2021	Two faculty members will be necessary to deliver the curriculum for the FUNS Program. One faculty will be identified at the program director, and the other will serve as the clinical coordinator. Both faculties will be responsible for delivering the curriculum. Beyond the initial start-up costs, sufficient revenue should be generated from tuition and other fees to support the resource needs of the program.	Individuals from local funeral homes and crematoriums are willing to provide support through offering their facilities as clinical sites and preceptors for training purposes, service on the advisory committee for the FUNS Program, scholarships for accepted learners, course instruction, assistance with accreditation through the American Board of Funeral Service Education, as well as contacts with which to obtain supplies from national funeral service vendors.
Logistics Management – Bachelor of Applied Science (BAS)	Focuses on project management skills within the field of logistics.	Fall 2021	\$95,000 for new faculty, with primarily online delivery. Current equipment and facilities are sufficient to establish this program.	None
Computing & Information Technology: Network System Administration –Bachelor of Applied Science (BAS)	This program's course of study provides students with education and skills required by today's information technology industry. Instruction includes courses on Modern Systems Administration including edge devices, endpoints, on-premise and multi-vendor cloud systems. It provides students with a wide array of training in various areas related to modern systems administration. Completion of this program prepares students for successful completion of a number of industry certification exams such as CompTIA A+, Network+, and multiple Microsoft, AWS, and Red Hat Certifications. Instruction takes place through hands-on instruction in these technologies.	Fall 2024	Implementation of this degree would require the addition of one faculty member. Current facilities and equipment will suffice for this program.	None

New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
Computing & Information Technology: Cyber Security – Bachelor of Applied Science (BAS)	This program provides students with the skills necessary to investigate digital crime, work with compliance, and understand the legal ramifications of digital crimes. Students who complete this program will be able to collect evidence from an incident using digital forensics techniques. Students will be able to create incident reports, conduct a risk assessment, analyze digital data for possible threats, and understand how to govern and mitigate risk.	Fall 2024	Implementation of this degree would require the addition of one faculty member. Current facilities and equipment will suffice for this program.	None
Computing & Information Technology: Software- Web Development and Database Management – Associate of Applied Science (AAS)	This degree would combine the current Web Development and Database Management degrees. This degree prepares students for employment in fields related primarily to computer software. Core courses cover fundamental knowledge area and the CIT concentrations cover specific software skills in web development and database management.	Fall 2022	Negligible. All coursework to present this program currently exists in the CSN catalog. CS, CPE, and IS courses will be employed. Current facilities and equipment will suffice for this program.	None
Accounting: Forensic Accounting – Bachelor of Applied Science (BAS)	The BAS in Forensic Accounting is designed to provide graduates with the requisite skills to review accounting documents and systems for errors, misrepresentations, and to reconstruct audit trails where systems have failed or have been tampered. The program will work hand-in-glove with information security professionals to detect and repair financial systems. This program will utilize and build on the existing Accounting AAS degree.	Fall 2021	Addition of two doctoral level faculty members.	None
Environmental Laboratory Sciences – Bachelor of Applied Science (BAS)	Focuses on technician level environmental laboratory skills within the commercial laboratory industry. Instills basic skills, abilities, USEPA, CWA, RCRA, and SDWA quality control protocols, and competence in support of laboratory operations and management within Nevada and the region. An industry advisory committee has been established with letters of support provided.	Fall 2022	Current equipment is sufficient to establish the program. Current full-time instructors are qualified to teach upper-division coursework. One or more qualified part-time instructors would be hired for selected courses and come from industry. Estimate maximum of 5 upper-division classes taught by part-time faculty per semester. Full-time faculty can teach upper-division courses as overload. Each 3-credit, upper-division class is taught at 1.25 IU/credit. Up to 15 credits/semester x 1.25 IU/credit x \$875/IU x 2 semesters = \$18,562.50 Total per year (maximum): \$32,812.50	NV Workforce STEM Grant and Perkins can be used to purchase additional equipment. However, these grants are not required.

—— 2021-2025 Planning Report ————

New Program Name/ Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
Sports and Recreational Management – Associate of Arts (AA)	The AA in Sports and Recreational Management is designed to provide graduates the skills to coach, officiate, and manage high school, club, city rec, youth leagues and beyond. The program will work hand in hand with the Nevada High School Activities and officials' associations, as well as city and county governments, to provide quality coaches, officials and employees. The degree will allow for the implementation of safety and health protocols, in addition to proper etiquette and supervision of sports teams and recreational programs.	Fall 2022	3-5 adjunct faculty members and some facility improvements to NLV gym will be needed for the program.	None
Advanced Manufacturing: Production Technology – Associate of Applied Science (AAS)	This program prepares graduates for employment as a Production Technician with skills in CNC Machining, Metrology, CADD/CAM, Automation/Robotics, Power Systems, and Materials Testing. Graduates are prepared to program, troubleshoot, and implement integrated automated production equipment including CNC milling/turning centers, programmable logic controllers, power sources, and robotic systems for various manufacturing applications.	Fall 2022	This program will require two additional faculty members with specialized credentials in manufacturing technology. Facilities with metrology and CNC equipment suitable for replicating industry experiences. Current facilities in automation, power technologies, and materials science are available.	Federal Perkins funding can be employed to provide specialized equipment and faculty professional development. Other funding for displaced workers can be engaged to provide equipment and infrastructure adaptation.

Student Services

The Student Affairs Division within CSN plans to support current and future academic programs through existing and expanded student service support programs.

Brief Description of New/ Expanding Student Services	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
Degree Planner Implementation	Degree Planner is the academic planning module of the Starfish platform, that provides students with a proactive, personalized, step-by-step roadmap to graduation, even as their goals and circumstances change. Degree Planner implementation kicked-off on September 6, 2018.	March 2021	Included in Starfish contract	Lumina Talent Hub Grant
Upgrade of Starfish	CSN will implement new features of Hobsons Starfish such as predictive analytics, more robust career assessment and exploration tools, retention scores, and strategic consulting upgrade to enhance the functionality and usage of Starfish.	Summer 2021	\$128,208 – per year for 5 years	None
Testing Centers - Improve Testing Center Technology	Identify resources to renovate three (3) Testing Centers college-wide to increase capacity and meet diverse student demands in support of delivering evidence-based programs and services that promote student access, progress, completion, and a consistent student experience.	Spring 2021	\$462,062.65	None
Human Capital - Staff Support	Resolve to align and organize services to evolving students' and communities' needs. Strongly consider and implement AACRAO recommendations college wide. These will improve student access, success, and provide a consistent student experience.	Spring 2021	\$175,545	None
Improving the advisor/student ratio to 350:1	Implementing a case management strategy to target full-time degree seeking, First-Time in College Students (FTIC) based on credits earned at the 15,30, and 45 hours. Projected need is 84 advisors total to reach a ratio of 350:1 by 2022. The current ratio at 1:790, with 46 advisors still needing to be hired.	Expected completion 2022	\$2,052,000.00	None



Great Basin College

Introduction

Great Basin Colleges' Academic Plan identifies two-year program goals and associated expenses. The goals identified herein are aligned with GBCs institutional priorities and are considered critical for future sustainability.

Strategic Objectives

Great Basin College presented its 2014-2021 Strategic Plan to the NSHE Board of Regents at its meeting in June 2014. The College in September 2020 completed its seven-year accreditation visit and is currently developing themes and goals for the new strategic plan to be completed by the end of 2021. GBC continues to make progress with many of our goals while still sharing a need for continuous improvement especially as we begin to outline new goals for the next Strategic Plan. Beginning in Fall 2020, the Strategic Planning Committee will engage the college community in a participatory process to re-examine our Mission, Vision and Values and revise our Strategic Plan to guide our academic and student affairs planning. As part of the strategic planning process GBC is also developing a Technology Plan beginning Fall 2020 that will serve as a guide to the allocation and use of technology resources in support of student learning and institutional effectiveness. This plan will be reviewed on an annual basis and will be integrated with institutional and program level planning. The current Academic Master Plan presented here continues the planning trajectory set in the previous plan and includes updated institutional goals for our academic programs and student services.

GBC Mission Statement

Great Basin College enriches people's lives by providing student-centered, post-secondary education to rural Nevada. Educational, cultural, and related economic needs of the multicounty service area are met through programs of university transfer, applied science and technology, business and industry partnerships, developmental education, community service, and student support services in conjunction with certificates and associate and select baccalaureate degrees.

Core Themes

- Provide Student Enrichment
- Build Bridges and Create Partnerships
- Serve Rural Nevada

GBC Vision

While maintaining the strength of its community college mission, Great Basin College will remain an economically sustainable institution through growth, by increasing enrollment, expanding its service area, offering more laddered bachelor's degrees and becoming nationally known for its innovative distance delivery systems, all leading it to be recognized as an indispensable and evolving provider of post-secondary education in rural Nevada.

The vision of programs and services identified in this plan fulfill GBC mission and core themes. Importantly, they address the educational and training needs of rural Nevada and fulfill the NSHE agenda of creating a more educated public and skilled workforce. GBC is exceptionally well positioned to meet current and future challenges facing higher education and the changing workforce. We will capitalize on our distinctive strengths and the substantial gains established over the past decade, through the following goals:

Academic Affairs

- Identify and promote high-impact teaching and advising practices.
- Develop a stronger commitment to Diversity, Equity and Inclusion.
 - ♦ Foster inclusive campus climate
 - ♦ Recruit and retain a diverse student body and a diverse workforce
 - ♦ Eliminate student achievement gaps
 - ♦ Creation of a Latinx Leadership Program
- Promote faculty development opportunities that will create conditions where GBC faculty have the content and practice readiness to serve both current and future needs of students.
- Evaluate the impact of GBC's enrollment growth on our academic programs through data-driven analysis.
- Repurpose the Prior Learning Assessment process to meet changing employer needs.
- Establish effective and flexible learning environments.
 - ♦ Align outcomes assessment and data analysis at the course, programmatic and institutional level.
- Create faculty exchanges with local Nevada rural high schools to better align curriculum and create seamless transitions from high school to college.
- Expand distance education opportunities.
 - ♦ Expand and enhance online degree program offerings and courses at GBC
 - ♦ Expand the branding of online programs and courses that support our reputation of excellence in online education.
 - ♦ Enhance and expand support for GBC faculty regarding the use of technology and distance education teaching.

Student Affairs

- Expansion of our Dual Enrollment program through recruiting new school district partners and expanding those relationships with existing school districts and home school associations.
- Establish strategic international partnerships, exchange and study abroad programs, that will enhance GBC's online presence and opportunities available to students.
- Improve the advisor/student ratio by increasing the number of academic advisors.
- Increase student satisfaction and engagement across all student services and academic affairs.
- Increase student success, retention, persistence, and completion.
- Modify instruction and student services policies to a level that they are current, accessible, relevant and regularly assessed.
- Expand our capacity within critical areas of Student Services.

Academic Programs

Over the last decade, GBC's Academic Master Plans highlighted the need for expansion of existing programs, particularly of technical programs. Since then, in 2019, GBC underwent a curricular review process which highlighted the need to revise, expand and eliminate programs in addition to improving our focus on current academic programming outcomes rather than the development of new programs that may not be sustainable. GBC will continue to build on opportunities that enhance/expand existing programs.

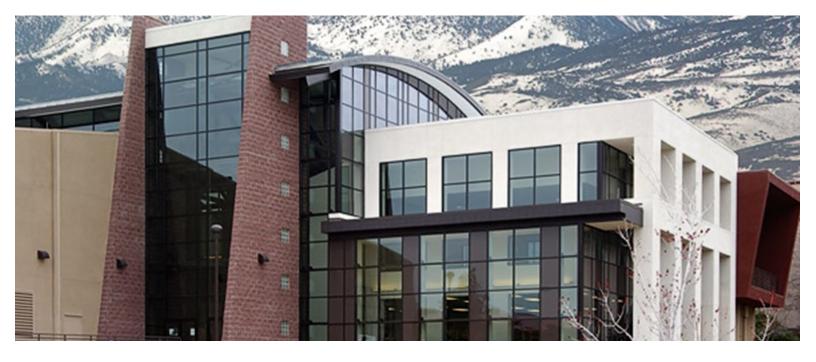
NOTE: Planning identified below supports GBCs Mission, Vision and Core Themes.

New Programs Name/Expansion of Existing Programs	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
BAS Engineering Technology	Having 5 strong AAS degrees in high demand technical fields has warranted an avenue for graduates to pursue a technical level engineering degree	2022	Faculty, operating and equipment expenses of \$182,000/year.	Grant funding will be sought to support program expenses.
Bachelor of Arts (BA) in Early Childhood Education (ECE)	Currently, GBC has an Associate of Arts in ECE. An online Bachelor degree will provide additional ECE pathways throughout rural Nevada. This program will focus on providing undergraduate students with a solid foundation in theories of childhood development, designing teaching and assessment strategies, and analyzing effective classroom strategies that promote quality education.	2021	No estimated costs at this time	No additional funding needed.
BAS/BS (TBD) in Health Care Administration	With multiples AAS health science program degrees this additional online program will create a pathway to a BAS/BS (TBD) in Health Care Administration	2022	One full-time instructor (estimated \$65,000) and one part-time instructor \$9,600 per year.	Grant funding will be needed to start this program.

Student Services

To support and align academic programs with GBCs Mission, Vision and Core Themes, Student Services is committed to improving strategies to promote student success and access to support services. Support services provided are not dependent on students' zip codes. Services are available to ALL students whether they are enrolled in live or interactive video instruction at the main campus, centers, satellites or taking classes completely online.

Brief Description of New/ Expanding Student Services	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Funds
1.0 FTE Advisor	GBC seeks to build more academic advisement to support student retention efforts.	2021	55,000	None
1.0 FTE Dual Enrollment Coordinator/Advisor	To strengthen student life activities GBC requires a student life coordinator.	2021	55,000	None
o.5 FTE Coordinator for Latinx Leadership Program	GBC seeks to support the recruitment, student success and retention efforts of our Latino student population.	2021	20,000	None



Truckee Meadows Community College

Strategic Objectives

Vision: Truckee Meadows Community College creates the future by changing lives.

Mission: Truckee Meadows Community College promotes student success, academic excellence and access to lifelong learning by supporting high-quality education and services within our diverse community.

Values: The values upon which Truckee Meadows Community College bases its mission and vision statements are the principles, standards and qualities the college considers worthwhile and desirable. Truckee Meadows Community College is committed to:

- Student access and success
- Excellence in teaching and learning
- Evidence of student progress through assessment of student outcomes
- Nurturing a climate of innovative and creative thought
- Collaborative decision making
- Community development through partnerships and services
- Ethical practices and integrity
- Respect, compassion, and equality for all persons
- Responsible and sustainable use of resources
- Fostering attitudes that exemplify responsible participation in a democratic society

Core Themes: TMCC has established 13 objectives under four core themes: Student Success, Academic Excellence, Access to Lifelong Learning, and Stewardship of Resources:

Student Success: TMCC supports student pursuit of a variety of educational goals, including graduation, transfer, career advancement, and personal enrichment. We realize that the diversity of students attracted to our institution need wide and varied support to reach their goals. Highquality academic support services are essential for students to effectively access and use

information that will facilitate their learning and their progress through their academic programs. Interpersonal, intrapersonal, and practical skills are essential components of a holistic approach to academic and career success. Students must be given the opportunity to develop and advance these skills.

- Objective 1. Improve successful completion of students' educational goals, including graduation, transfer, and CTE completion.
- Objective 2. Provide high-quality student support through library resources, tutoring, advising, and information services.
- Objective 3. Provide student engagement opportunities that build interpersonal, intrapersonal, and practical skills.

Academic Excellence: TMCC values excellence in teaching and learning, and evidence of student progress through assessment of student outcomes. Systematic review and assessment verifies student learning and achievement, improves teaching, and assures quality courses and programs for our students. For our region to prosper economically and sustain a high quality of life, it needs an educated, skilled workforce. By aligning postsecondary education with the current and emerging needs of business and industry, TMCC helps to meet the specific needs of our community. A relevant and engaging learning environment enhances the delivery of high-quality instruction that is critical to academic excellence. Nurturing ongoing professional development supports faculty and staff staying current in their fields, and enhances instruction and effective service to students. Celebration of professional growth encourages this mindset.

- Objective 1. Maintain and improve the quality of course, general education, and program offerings through systematic assessment and review.
- Objective 2. Offer high-quality programs that meet the workforce educational needs of our community.
- **Objective 3.** Create a learning environment that promotes academic growth for students.
- **Objective 4.** Nurture and celebrate a culture of intellectual and professional growth among faculty and staff.

Access to Lifelong Learning: TMCC welcomes and serves students who may not be ready to enter at the college level, who may not want a traditional degree, or who come to us with prior experiential learning that we recognize and value. TMCC fulfills this commitment by providing equal opportunity for members of our community to thrive academically and professionally. Students learn best in a safe, inclusive environment where they are valued members of the campus community. Welcoming guests fosters a positive relationship with our community. Alumni who remain connected to TMCC support their own lifelong learning and that of current and future students.

- **Objective 1.** Serve as an Open Access institution.
- **Objective 2.** Cultivate a welcoming, safe, and inclusive environment.
- **Objective 3.** Encourage alumni to remain persistent with their engagement in the institution.

Stewardship of Resources: State support is the financial life-blood of the College. TMCC strategically reviews its enrollment marketing and enrollment management processes to ensure that enrollment is stable and NSHE Performance Pool targets are met. TMCC's Foundation provides support to the College by way of scholarships, instructional equipment, professional development, and capital. This support is

key to the success of the institution and its mission. Effective, efficient college operations are responsive to the needs of the campus community, are sustainable, and are regularly evaluated to ensure they are meeting the needs of their constituents.

- **Objective 1.** Optimize state-funded revenue.
- **Objective 2.** Maximize and grow non-state-funded revenue streams including grants, fundraising, and Workforce Development offerings.
- **Objective 3.** Maintain and enhance the effectiveness and efficiency of College operations.

Academic Affairs

Academic Affairs is undertaking the following initiatives towards student success, academic excellence, and access to lifelong learning:

- Focusing on part-time students to address the disparity between full-time and part-time student persistence and degree completion
- Developing a faculty advising model to assist with the academic advising needs of students
- Offering the Association of College and University Educators (ACUE) Course in Effective Teaching Practices to assist faculty with implementing essential practices shown to improve student outcomes
- Implementing a Learning Commons model within our library space to encourage communication and collaboration and enhance student participatory learning
- Expanding Learning Communities towards student success
- Encouraging completion of gateway math and English courses with additional messaging and drop holds on key courses in the gateway completion pathway
- Increasing dual credit offerings within Washoe County School District high schools

Division of Business and Social Sciences

The Division of Business and Social Sciences recently began new programs in Social Work, Hospitality and Tourism and revamped programs in Secondary Education degrees in partnership with NSHE 4year institutions with an initial focus on English and history and will focus on growing these programs in the coming academic years. Finally, the Division will be exploring the feasibility of adding an associate degree in Physical Education or a closely related field.

Division of Liberal Arts

The Liberal Arts Division recently introduced a new AA degree and Advanced Certificate in Graphic Arts and Media Technology, with specialties in Graphic Design, Motion Graphics, and Web/UI Development. The Graphic Arts and Media Technology program is part of a 3+1 agreement with Nevada State College (NSC), where students can complete their fourth year of a BA program online or by NSC instructors teaching on the TMCC campus after completing the AA and Advanced Certificate.

The Division plans to introduce an AA Communication Studies and Creative Writing emphasis under the existing AA English.

Division of Technical Sciences

The TMCC Division of Technical Sciences continues to work with industry and community partners, and its program advisory boards, to ensure programming is meeting the needs of the local economy. With the support of the Governor's Office of Economic Development (GOED) and local employers, the division is developing a Bachelor's of Applied Science pathway to Cyber-Physical Manufacturing to embrace the emerging Industry 4.0 needs. The Division has increased its enrollment in the Advanced Manufacturing program (75 students to 522 in four semesters) to serve the needs of major employers including Tesla Motors, Panasonic Energy of North America and others. As these companies continue to build up and expand, the need for training beyond certificates and associate degrees is emerging and these graduates will serve as the pipeline to the BAS.

In addition, the Division has seen an increase in enrollment in its Apprenticeship programs in partnership with local unions and through a U.S. Department of Labor grant, and is developing skills certificates for these students to earn a credential that stacks into the certificate and degree. The Division is also looking to expand its Automotive Technology program to include hybrid technology, and is creating other skills certificates (HVAC, Diesel) that stack into existing programs to award workforce credentials to students as they progress through their programs of study.

Division of Life Sciences, Allied Health & Public Safety

The TMCC Division of Life Sciences, Allied Health & Public Safety (LAP) is home to the Biology and Community Health Sciences Department and a wide variety of certificate and degree programs related to health and safety. The quality education offered through these programs prepares students for transfer or for direct entry into the workforce, and there are numerous pathways designed as stepping stones for students to start at the entry-level and stack their training and credentials to advance their education. TMCC designs these programs mindful of students who need a direct pathway to employment, but have the talent and aspirations to continue to advance their careers in the future.

The recently approved RN to BSN degree is scheduled to begin Summer 2021, and will be the third bachelor's level program in the Division, joining the BS in Dental Hygiene and the BAS in Emergency Management and Homeland Security. The Division offers training in CPR/First Aid, entry-level certification in Phlebotomy, EMT basic and EMT advanced skills certificates, Certificate of Achievements in Dental Assisting and Fire Technology, a Certified Nursing Assistant (CNA) program, Advanced Certificates in MRI and CT medical imaging, and training in Wildland Firefighting. The Division works in partnership with the College of Southern Nevada to offer students in the north a pathway to an Associates degree in Surgical Technology or in Radiation Therapy Technology without needing to relocate. This helps meet local workforce needs in the most efficient way possible.

The TMCC LAP Division offers transfer AS degrees in Biology, Community Health Sciences, and Dietetics, which all seamlessly align to NSHE bachelors' programs. The Division also offers a directto-workforce Paramedic program, a Fire Academy to prepare students for entry-level municipal firefighting, an AS in Nursing, and AAS degrees in Dental Assisting, Dietetic Technician, Fire Technology, Prehospital Emergency Medicine, Radiologic Technology, and Veterinary Nursing.

Division of Math and Physical Sciences

The TMCC Division of Math and Physical Sciences serves students in the areas of math, statistics, astronomy, chemistry, computer science, environmental sciences, geology, geography, engineering, and physics. The enrollment is approximately 19% FTE of the college. The division has six associate degrees and is a substantial contributor to general education. The courses and programs offered in this division prepare to transfer to a college or university. In June 2019 the Board of Regents passed a revised College Ready Gateway Policy mandating that all students regardless of placement must be enrolled in a college-level math course with their first academic year. The math program in Fall 2020 adopted the corequisite model for the Math for Liberal Arts pathway, and in Fall 2021 it will additionally add the STEM math pathway as an open-enrollment corequisite model of instruction for gateway mathematics. By Fall 2021, placements scores will not be needed to enroll in a gateway math course, if taken with support. This change eliminates potentially three levels of remediation for many students and can significantly improve completion rates in gateway math in less time, and increase graduation rates, since math is often a barrier for students when completing degrees. This will eliminate the need for a Math Skills Center and any stand alone developmental math courses, unless they are taught as part of a high school jump start program. There are no plans for program or degree changes within this division.

Academic Programs

The following table summarizes new academic programs that TMCC is planning to implement in the next four years (2021-2025):

New Program Name/Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Bachelor of Architecture (B.Arch)	This program would provide a Professional certificate accredited by the National Architecture Accrediting Board (NAAB).	Fall 2022	\$155,000	Private industry contributions and grants will be sought
AAS Artificial Intelligence	This program would provide a credential in Artificial Intelligence including machine learning. The use of AI technology in multiple sectors is rapidly growing with increased demand for trained workforce.	Fall 2021	\$75,000	Possible State/grant funds or industry contribution
Associates of Applied Science in Tool & Die	With the manufacturing sector increasing in Nevada and the retirement of the Boomer workforce, there is a growing need for Tool & Die Makers. There are currently no Tool & Die programs in Nevada. GOED as well as multiple employers have stated the need.	Fall 2021	\$150,000	Industry Contribution and State funding

Student Services

The following table summarizes new student services that TMCC plans to implement in the next four years (2021-2025):

Brief Description of New/ Expanding Student Services	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Academic Advisement Model	Researching best practices and opportunities to incorporate faculty academic advisement into current advising model.	Pilot Spring 2021	TBD based on model selected	
Communities of Color Holistic Mentorship System	Bringing together the TMCC Men of Color (MOC) recruitment program, Students of Color (SOC) mentorship program, and Faculty of Color Coalition (FOC), this will be a trifecta of mentorship. The goal is to have the MOC students mentored by SOC students, and SOC students mentored by the FOC faculty members.	Fall 2022	\$20,000	American Family Insurance Dreams Foundation (\$5,000)
Career Hub Meadowood Resource Center	Leverage Career Hub's new location at Meadowood Site with the goal of being the hub of student service Career resources for students, college personnel, area employers and the community, using the new technology and centralized location. Resources to leverage: Kiosk for virtual appointments, presentation equipment, including poly-com connection to present to other NSHE and NDOC locations.	Spring 2021	\$75,000 (includes existing Career Hub staff salaries)	Additional funding for events will be sought from industry partners when appropriate.
Counseling Center expansion of efforts to reach students of color to reduce disparities in mental health	Integrate elements to Counseling Center program to better address mental health challenges faced by students of color. This will include: expanding peer mentor training, adding professional development workshops for faculty and staff focused on mental health awareness specific for students of color, understanding racial trauma and other relevant topics.	Fall 2021	\$o additional cost at this time.	None – but will look for relevant grant funding to support peer mentors and other programming costs.
Expansion of E-forms and Workflows OnBase	The impacts of COVID 19 has reinforced the need for electronic forms and processes to help students succeed in their educational endeavors.	Fall 2021	\$50,000	Existing Technical Fees
Faculty Diversity Advocates – wages integrated fully into EISO	Up to 4 faculty member additional assignments reporting to the Equity, Inclusion, and Sustainability Office. These positions will serve as a Diversity Advocate and liaison for diversity initiatives with faculty and the college community.	Fall 2022	Up to \$19,800/yr	
Financial Aid Consumer Information-Athletics	With a soccer program at the college, the Equity in Athletics Disclosure Act (EADA) requires a school to disclose to prospective students the commitment of the college to provide equitable athletic opportunities for its male and female students. Information must be available to students, prospective students, and the public.	Academic year 2020-21	\$o costs	n/a
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Brief Description of New/ Expanding Student Services	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Financial Literacy- Repayment Workshop	The Financial Literacy and Money Education by Students (FLAME\$) offers in person entrance counseling to new and previous loan borrowers. With the success of the in person entrance counseling workshops, FLAME\$ will offer a repayment workshop educating students how to plan and repay their federal student loans. This will be another strategy to help reduce the student loan default rate for the college.	Fall 2022	\$0	n/a
Expansion of International Student Services	Increase the number of international students served by focusing on recruitment to target community college markets and scaling up our partnerships and collaborations.	Fall 2020 for virtual, Fall 2022 for full implementation	\$75,000 annually	
Jump Start Expansion	Expand outreach and registration services for Jump Start dual enrollment students by enhancing partnerships with school districts, maintain tuition discounts and offering a greater variety of class modes.	Spring 2022	\$15,000 (covers part time LOA salary)	n/a
Expansion of Men of Color Program	TMCC's Men of Color Mentorship Program (MOC) aims to motivate underrepresented high school sophomores to attend college. The program will be expanded in to include an additional high school, bringing the total number of WCSD high schools to 5.	Spring 2022	\$23,000	IDeA Network Biomedical Research Excellence (INBRE) (approx. \$9,200)
Re-Entry Program Expansion	The Re-Entry program supports adults facing barriers to education and employment attain skills necessary to sustain gainful/living-wage employment. Expand and formalize partnerships with community agencies (CSA, Children's Cabinet, Ridge House, JOIN, Opportunity Alliance) and state agencies (DWSS, NDOC). Participate in the ACT Work Ready Communities Initiative for Northern Nevada. Create a more standardized assessment process by integrating WorkKeys assessments into the program.	Spring 2021	\$200,000	SNAPET – federal reimbursement Displaced Homemakers Grant (DETR) Perkins V Prison Education allocation from the Legislature
"Searching for Excellence" – TMCC Search Committee Diversity, Equity, and Inclusion Mandatory Training	The TMCC mandatory diversity training for professional staff serving on search committee will be reinvented with modern concepts and research by the TMCC Diversity Committee.	Fall 2021	\$5,000	

Brief Description of New/Expanding Student Services	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Add additional elements to Starfish by Hobsons Retention tools for students in special population groups.	Holistic approach to student success and retention facilitates communication about resources, referrals, and student progress. Additional elements to be added: intake form to include information about food and housing security, retention score to identify students for more targeted intervention.	Spring 2021	\$85,208/yr for Hobsons/ Starfish Contract.	None at this time, will look for funding opportunities
TMCC Athletics Expansion	TMCC athletics program hopes to add affordable "low cost" options such as implementing eSports. We aspire to expand and provide more opportunity to Nevada student-athletes to include men's and women's basketball, volleyball or cross country by 2025.	Fall 2024-25	TBD	Student fees
TMCC Intramural Sports	With the addition of the new Sports and Fitness Center, TMCC hopes to provide the addition of intramural sports for its students. This brings added health and wellness opportunities and adds to the college student experience.	Fall 2023	TBD	Student fees or membership fees



Western Nevada College

Strategic Objectives

Mission

WNC contributes to solutions for the 21st century by providing effective educational pathways for the students and communities of Nevada.

Vision

WNC is an integral and innovative educational partner fostering equity and a life of learning in an inclusive environment for the evolving, diverse communities we serve.

Values

WNC is student centered, inquiry driven, and data informed as we nurture community connections and promote an environment of equity and inclusion.

Institutional Goals

1. Access

- WNC provides access to educational pathways and opportunities.
- WNC students make an efficient transition from preparatory to college level coursework.
- WNC provides equitable access for students regionally and demographically.
- WNC provides access to dual credit pathways.

2. Success

- WNC supports student learning, progress, and completion.
- WNC advances student achievement of learning outcomes at course, program, and institutional levels.
- WNC builds student engagement with education and the WNC community.

3. Close the Achievement Gap

- WNC identifies and closes achievement gaps across student populations by supporting achievement across demographic groups in traditional and non-traditional fields.
- WNC sustains a learning environment that promotes equity and inclusion.

4. Workforce

• WNC responds to the needs of industry and provides effective pathways for students toward in-demand occupations.

5. Research

• WNC contributes solutions to the critical issues facing 21st century Nevada.

Academic Programs

The following table summarizes new academic programs that WNC plans to implement in the next four years.

New Program Name/Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
BAS Construction Management; new emphasis area in residential and commercial inspection; Energy	WNC currently offers a 12 credit program in residential inspection but not all 12 hours apply towards the BAS in Construction Management. A new emphasis area would allow those students to pursue the BAS degree more easily.	Fall 2021	No additional cost, courses already exist.	Using existing resources
AAS Paramedic Medicine	Prepares qualified students for a career as a paramedic (Emergency Medical Technician, Paramedic-EMTP). AAS program requires general education credits and is designed for transition to BAS Technology emphases.	Fall 2021	\$100,000-150,000	Private donations and grant funding for startup costs. Partnership with regional EMS training centers provide startup support in faculty and equipment.
BAS Sign Language/ English Interpreting	This program prepares students to become professional sign language interpreters. A bachelor degree is a requirement for a registered interpreter.	Fall 2022	\$100,000	None
AAS Peace Officer Standards and Training (POST) Academy	Program prepares students for a career as a peace officer with Nevada law enforcement agencies, as prescribed by the State of Nevada, Peace Officer Standards and Training Commission (POST).	Fall 2021	\$200,000-\$300,000	Possible state/federal grants

New Program Name/Expansion of Existing Program	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
BAS (Organizational and Project Management) Automation and Industrial Technology Pathway	This pathway provides opportunity for students in the Automation field to pursue a bachelor degree. The core of the existing BAS program provides leadership and management base. Additional courses in the AIT area will provide additional technical knowledge.	Fall 2022	Current faculty plus \$20,000 curriculum development	Seek grant support
BAS Science (Organizational and Project Management) Computer and Information Technology Pathway	This pathway provides opportunity for students in the Information Technology field to pursue a bachelor degree. The core of the existing BAS program provides leadership and management base. Additional courses in the CIT area will provide additional technical knowledge.	Fall 2022	Current faculty plus \$20,000 curriculum development	Seek grant support
AAS in Conservation Technology	Upcoming career pathway. Entry level installation, maintenance, and repair. Builds on the HVAC curriculum	Spring 2021/Fall 2021	\$70,000 equipment and curriculum	Perkins Grants Private donations
AAS in HVAC	High Demand High Wage career. Entry level installation, maintenance, and repair.	Spring 2021/Fall 2021	\$70,000 equipment and curriculum	Perkins Grants Private donations

Student Services

The following table summarizes new student services that WNC plans to implement in the next four years.

Brief Description of New/ Expanding Student Services	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Jump Start College Expansion	Dual credit high school program currently serving 415 students by offering up to fifteen transferrable credits per semester to qualified junior and senior high school students.	Program launched in Fall, 2014 with nine high schools. WNC will continue the program and continue to fund support and operations.	\$300,000/yr Coordinator, Cohort Coaches, Travel and Operating	Student Fees State Funding Grants

Brief Description of New/ Expanding Student Services	Brief Description	Year of Implementation	Estimated Cost	Funding Sources Outside of State Dollars
Dual Enrollment Expansion	Continue to build dual- enrollment programs (in addition to Jump Start) with high schools	Fall 2021	\$50,000	State Grants to school districts; Registration fees
Veterans Resource Center Expansion	Cohort model support program to assist veterans in college access and success.	Fall 2021	\$150,000/yr, Coordinator, Assistant, Travel and Operating	Grant sources for continuing support.
Latino Resource Center	Cohort model support to assist first generation, low-income, non -native English speakers in college access and success.	Fall 2021	\$100,000/yr Coordinator, Cohort Coaches, Operating and Travel	External funding is being pursued.
First Generation, Nevada Promise, Native American, and Bridge Cohorts	Structured cohorts with full time block schedules, embedded coaches and coordinator	Fall 2021	\$120,000/year Coordinator and Cohort Coaches	External funding will be pursued
Orientation Program	Enhance Orientation program along with a 1 or 2 day program similar to UNR's Nevada Fit (credit and non-credit)	Spring 2022	\$55,000/year Outreach Counselor	External funding will be pursued Registration Fees



Desert Research Institute

This section follows the NSHE format for DRI, as its institutional structure is unique among NSHE institutions in that it is not degree granting but serves as an integral component of NSHE's advanced training and research portfolio. DRI's research activity and achievements support NSHE's goals in several ways. Most relevant is NSHE Goal 5, Research. The heart of DRI's mission accomplishes the Board of Regents' goal to "(c)o-develop solutions to the critical issues facing 21st century Nevada and raise the overall research profile." DRI's research efforts seek to solve problems that federal, state, local, private-industry and philanthropic organizations have identified. DRI's research efforts also feed back into additional NSHE goals, including goal 1, access, by providing post-secondary graduate assistant and post-doctoral fellowship opportunities. It also supports goal 4, workforce, by providing career opportunities for graduate students and professionals in STEM fields.

Strategic Objectives

As an entrepreneurial research institute, DRI faculty develop innovative research concepts and secure external funding from federal, state, local, and private funding partners and sponsors to support their research. Given the scientist-driven nature of the organization, DRI's strategy is framed around bolstering the science-support enterprise and creating additional opportunities for researchers to advance research critical to Nevada's future.

DRI's new strategic plan is in the final stages of development and will be submitted to the Board of Regents later this year. The plan includes three strategic priorities:

- Optimize performance
- Elevate awareness
- Cultivate engagement

DRI's core strategic directions are outlined below and are linked to the priorities that they support:

Strengthen Partnerships with State and Federal Research Agencies Desired Outcome: Secure reliable funding from current federal research sponsors and identify new opportunities. Strategic Priority Supported: Optimize performance.

Increase Corporate & Public Partnerships

Desired Outcome: Establish new partnerships with industry. Strategic Priorities Supported: Optimize performance, elevate awareness.

Grow opportunities for commercialization of DRI intellectual property

Desired Outcome: Build on successes to streamline identification, support, commercialization, and downstream value capture of DRI research innovations with market or societal impact potential.

Strategic Priorities Supported: Optimize performance, elevate awareness.

Expand Individual and Foundation Philanthropic Efforts

Desired Outcome: Increase research funding from private foundations and individual donors Strategic Priorities Supported: Optimize performance, elevate awareness.

Enhance NSHE Collaborations

Desired Outcome: Form equitable and mutually-beneficial partnerships with other NSHE institutions, enhance state support for these collaborative research endeavors and infrastructure, and establish a broad understanding of DRI's role within NSHE. Strategic Priorities Supported: Optimize performance.

Additional strategic directions support the proactive engagement of the audiences critical to expanding and diversifying the DRI portfolio of resources:

Strengthen Education Initiatives

Desired Outcome: Create synergies between DRI's education-focused research and the Institute's traditional environmental science enterprise while addressing critical Nevada education needs.

Strategic Priorities Supported: Cultivate engagement.

Increase diversity among research faculty

Desired Outcome: Emphasize recruitment of a broad applicant pool that reflects the demographics of Nevada and the U.S.

Strategic Priorities Supported: Optimize performance, elevate awareness, cultivate engagement.

Enhance Public Engagement

Desired Outcome: Increase community awareness of DRI and the work that DRI scientists do in Nevada and around the world and ensure that policymakers see DRI as an unbiased source of scientific information for policy making efforts.

Strategic Priorities Supported: Elevate awareness, cultivate engagement.

DRI researchers are among the top scientists in the world in their specialties, and they are defining the future trajectories of their respective scientific fields. The highly entrepreneurial nature of the Institute is what has made DRI successful since its founding nearly 60 years ago. To continue this legacy, DRI's approach to developing strategic research directions must continue to be driven by research faculty.

DRI is currently developing a strategic plan that lays out organizational and research priorities. These strategic priorities will guide decisions related to allocation of resources and alignment of DRI's administrative framework.

Academic Initiatives

DRI will continue to support UNR and UNLV efforts to maintain Carnegie Foundation Highest Research Activity (R1) University status. Although the Carnegie charts do not rank DRI because we do not grant degrees, DRI plays an important role in graduate student recruitment and success within the system. More than 50 DRI research faculty are involved in teaching and advising at our fellow NSHE institutions, and in FY19, more than 35 graduate students worked in DRI laboratories and with DRI research faculty on projects throughout Nevada and around the world.

DRI has a collaborative agreement with UNR and UNLV, through which DRI graduate student faculty advisors receive partial salary coverage for time spent advising graduate students. This new partnership recognizes that 100-percent of DRI research faculty salary is supported by external grants and contracts and that universities benefit from the time and effort put forth by DRI graduate advisors, both financially and via Carnegie Tier 1 metrics.

Both of these mission-driven efforts build on the original 1959 DRI Nevada Legislative Mandate, which states that a core element of DRI's purpose is to "encourage and foster a desire in students and faculty to conduct research," "discover and develop talent for conducting research," "and promote all research within the system generally." While DRI's soft-money culture differs from that of other NSHE institutions, the priority remains to produce high-quality science and leverage a research-focused approach to help NSHE attract and train the next generation of Nevada scientists and engineers.

NSHE Collaborations:

Graduate Research Programs with UNR and UNLV

DRI will continue to work collaboratively with UNR and UNLV to ensure the continuation and evolution of high-quality research and graduate programs in order to – 1) sustain NSHE's national research competitiveness, 2) develop a pipeline to produce a skilled workforce that can serve the needs of Nevada's new economy and growing technology and manufacturing industry sectors, and 3) help Nevada's higher education students develop the cutting-edge skills and expertise that are relevant to our nation's emerging research needs.

Undergraduate Research

- DRI will continue to pursue avenues for the development of new undergraduate research training opportunities through collaboration with Nevada State College, College of Southern Nevada and Truckee Meadows Community College faculty and students.
- DRI will continue to work with the UNR and UNLV Offices of Undergraduate Research in welcoming students into DRI research programs. DRI will support faculty time to mentor undergraduates and encourages development opportunities for diverse students.

DRI Education Initiatives:

Office of Education

- DRI's Office of Education serves as a gateway to the Institute's educational activities, including the PreK-12 STEM education program Science Alive, citizen science projects, and broader impacts on federal grants. It serves the educational outreach interests of the Institute and allows for investment in the growth of DRI education and outreach programs.
- \Diamond DRI's flagship education outreach program, Science Alive, supports PreK-12 educators in STEM through training and delivery of curricular material so that all students can

acquire the knowledge and skills needed to work, live, and contribute in our community. Science Alive will continue to provide inquiry-based STEM curriculum at no cost to Nevada teachers through the program's Green Boxes, self-contained teaching kits that provide educators with unit lesson plans along with all of the supplies necessary to conduct each activity. Science Alive will expand educational offerings through STEM-kits for informal education programs as well as STEM-kits-to-go, so that distance learners have access to hands-on science activities.

- \Diamond DRI will lead the Nevada Robotics initiative to create engaging robotics opportunities for students across the state. Working with sister NSHE institutions, school districts, robotics education programs, industry and community partners, DRI faculty and staff will build and support robotics teams, activities, and curricula meant to inspire students to pursue careers in STEM fields.
- \Diamond Using seed funding from the Governor's Office of Science, Innovation, and Technology, DRI will grow Rural Nevada, Southern Nevada, and Northern Nevada STEM Networks, created in 2020 to strengthen STEM educational opportunities throughout the State. Bringing together education, business, government and non-profit leaders DRI will identify gaps and scale up STEM programs for all Nevada residents.
- \Diamond DRI will expand its Native Waters on Arid Lands program in partnership with tribal communities in the Great Basin and American Southwest to collaboratively understand the impacts of climate change, and to evaluate adaptation options for sustaining water resources and agriculture. The goal of the Native Waters on Arid Lands project is to increase the climate resilience of tribal agriculture and water resources on American Indian lands of the Great Basin and Southwest.

Graduate Fellowships

 \Diamond DRI has implemented a graduate student bridge fellowship program to allow outstanding master's and Ph.D. students to focus on research rather than the logistics of maintaining funding while they complete their degrees. Up to ten fellowships annually are awarded. They cover up to one semester of graduate student support and are designed to ameliorate the difficulties of synchronizing graduate student research activities with the timing and cycles of grant funding.

DRI Research Initiatives

The list of potential new and expanded DRI research initiatives shown below is representative, but not inclusive, of the wide range of research areas planned for addition or expansion in upcoming years. Many of these foci link, or have the potential to link, with the listed education initiatives.

Core Research Theme Improvements:

Atmospheric Research and Assessment

Building on its long-term success in ambient air quality monitoring (atmospheric aerosols and other pollutants) and numerical modeling of the atmosphere and climate including fine-scale computational fluid dynamics codes, Lagrangian particle models, medium-resolution regional weather and climate models, and fully coupled ocean-atmospheric global climate system models, DRI will expand existing research to include chemical transport modeling and multi-physics modeling of flow and particle interactions. Given DRI's strength in source characterization and exposure measurements and developing expertise in air quality modeling, DRI will also develop

- expertise in air pollution exposure modeling and air quality health effects research to complement those other areas of research.
- Building on the proven success of our weather modification and cloud-seeding programs, DRI will use various research methods to assess the effectiveness of cloud seeding for promoting enhanced snowfall in snow-fed arid-land river systems across the Western U.S.

Hydrology and Water Resources Management

- DRI is expanding its basic hydrologic sciences and applied water research portfolio across the institution to better understand, utilize, and manage water resources across Nevada, the nation, and internationally. Critical areas of research in the near-term are focused on understanding increasing aridity in the Southwestern US and the impacts that is having on water supplies, agriculture, and wildfires. Going forward, DRI will place an added emphasis on water policy and creating new mechanisms for stakeholders to collectively and sustainably manage water resources, a renewed focus on sustainable resource management in the Lake Tahoe Basin, and new applications of DRI's cutting-edge ice-core analysis technology.
- Utilizing DRI's collaborative research environment and industry-driven approach to creating decision support tools for Nevada's water managers, DRI faculty will also continue to build upon their work with Google to provide and enhance open-source tools to visualize and interact with climate and remote-sensing imagery for improved water management.

Ecosystem Sciences

- DRI core ecosystem science programs investigate the mechanisms of landscape change and how they interact with human activities over a wide range of spatial and temporal scales. From life at the molecular/microbial scale to ecosystem and agricultural sustainability, through geological processes, quaternary geomorphology and human societies and adaptation, DRI will research the dynamics of surface environments in the context of the Earth's coupled humannatural systems.
- DRI faculty will also continue to pioneer new research methodology to study and better understand how life exists in Earth's most extreme environments. This research will be critical to helping NASA prepare future missions in its search for life beyond our planet.

Genomic Medicine and Population Health Sciences

Renown Health and DRI are partners in the Renown Institute for Health Innovation (Renown IHI). Together, they are conducting the Healthy Nevada Project, a population genetics study that has enrolled, consented, and collected DNA and other health determinants data from more than 50,000 participants throughout Nevada. The Healthy Nevada Project is currently returning results of CDC Tier 1 conditions while focusing research efforts on lifestyle diseases such as cardiovascular disease, respiratory disease, diabetes, liver disease, and addiction.

Environmental Sensing

DRI will build upon expertise developed in remote sensing, geographic information systems (GIS), the use of unmanned aircraft systems (UAS), ground-based autonomous vehicles, and the Internet of Things (IoT), to advance the Institute's environmental sensing portfolio. DRI will increase research capabilities in areas such as smart communities and transportation, agricultural productivity, vegetation health, terrain analysis, water quality, and measurement of aerosols and air quality.

Wildfire Science

DRI plans to grow its cross-cutting wildfire science programs integrating fire processes, effects on smoke emission, air quality, forest health, post-fire hydrology, and disaster reduction. Proposed initiatives include understanding of wildfire spatial scaling, determining the effects of fire on carbon cycling, water balance, and fuel buildup in Nevada's sagebrush ecosystem, and use of big data approaches to assimilate and process data into models.

Mission Support Geosciences

DRI is working to enhance its ability to support critical energy stewardship and military operations missions. This includes assessing terrestrial and near-surface atmospheric environments, including the impact of military operations on the environment (i.e. range sustainability), terrain analysis, hydrologic flow, and the impact of environmental conditions on military operations (e.g., mobility, counter IED). Sustainable support for such assessments will focus on funding from the Department of Energy (DOE) and the Department of Defense (DoD) in collaboration as appropriate with DOE and DoD prime contractors.

Environmental and Societal Impacts of Climate Variability and Change

DRI will continue to expand its research expertise regarding the impacts of climate variability and change on resources and ecosystems (in Nevada and other Western states) in collaboration with key authorities as well as with state and federal agencies. DRI will further its climate research, monitoring and service efforts on how natural systems and human society must mitigate or adapt to climate variability and change.

Advanced Natural Resource Monitoring in Response to Extreme Weather/Climate Events

- Leveraging the Western Regional Climate Center, DRI will continue to improve data products and provide research to help water and land managers make better decisions related to the increased frequency of drought and other effects of a changing climate.
- Through the continued development of a cloud-computing web application for on-demand processing and visualizing climate and remote sensing data, DRI and its academic and private-sector partners aim to lead opportunities for advanced natural resource monitoring and process understanding and better inform environmental decision making.
- DRI is committed to the continued accessibility of climate and remote sensing data archives to researchers, decision-makers, and the general public.

Artificial Intelligence, Machine Learning, and Analytics Solutions

- DRI faculty will continue working at the forefront of new approaches to natural resource and urban infrastructure instrumentation, advanced data collection and integrated analysis to support intelligent decision-support systems throughout Nevada and around the world.
- Research in the earth and environmental sciences is becoming increasingly data driven. DRI will combine new advances in instrumentation and multi-modal sensing with novel applications of machine learning and AI techniques to extract value from data that is both informative and timely and can be used to provide contextual relationships in a range of scientific studies. This work will leverage current DRI expertise in data analytics and highperformance computing.

Research Innovation to Commercialization

- The Office of the Vice President for Research (VPR) guides innovations and technologies at their nascent states through the processes of securing preliminary intellectual property and early assessment of commercialization potential.
- The VPR consults with and conveys research products with commercialization potential to the DRC, which serves as the downstream technology commercialization partner to DRI.
- Building on DRC's successful spinout of Tu Biomics, DRC staff and board members and the VPR of DRI continue to refine the complicated process of technology transfer to further ensure the success of researchers in their commercialization efforts as.
- The concerted efforts of the VPR and DRC result in the licensing of technologies to outside entities, support of research at DRI to further development of technologies, faculty led commercialization efforts, and companies spinning out following incubation within DRC.