

# SUSTAINABILITY REPORT

SJSU Progress on the United Nations Sustainable Development Goals



**SJSU** SAN JOSÉ STATE  
UNIVERSITY







**November, 2023**

I am pleased to share San José State University's progress in advancing the United Nations' Sustainable Development Goals (SDGs). This report reflects the progress and accomplishments of faculty, staff, and students in the advancement in topics such as climate action, social and economic justice, clean energy, and gender equality at SJSU.

Sustainability remains one of the big issues of our time. At SJSU, we are striving toward a future whereby all of our students graduate with a firm understanding of what it means to be sustainable and to gain an appreciation of how their personal actions and choices can have either a positive or negative impact on our environment.

San José State continues to be an innovative leader in this area, particularly in our buildings and facilities, but also in our academic programs and co-curricular initiatives led by our Division of Academic Affairs. Our efforts are centered on a variety of environmental and sustainability issues that we hope will make us one of the "greenest" and most sustainable campuses in America. To do this successfully, however, will require an interdisciplinary approach and a great deal of focus and commitment.

This report was prepared through collaborative efforts of the entire campus community, with active participation from students, faculty and staff. I am especially grateful to the many staff members and students that helped gather, analyze and compile this data. It is a laborious process, but one that helps the campus continue our sustainability efforts.

I am delighted to be leading a campus so dedicated to making this university one of the most environmentally sound in America. We are committed to staying focused, making smart decisions about our natural resources, and learning about vital environmental issues as we strive to ensure that everyone who passes through our gates leaves with a commitment to making good personal decisions about the way we treat the Earth.

If we hold true to these values, we know we will be doing our part to enhance the health of our shared planet.

Sincerely,



**Dr. Cynthia Teniente-Matson**

President





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# SUSTAINABLE DEVELOPMENT GOALS



## Introduction

### *United Nations Sustainable Development Goals and SJSU*

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San José State alumnus Gaylord Nelson, '39 Political Science, held the first nationwide teach-in on the environment, which became Earth Day, sparking a movement that has only grown more significant in the past 53 years. SJSU and Spartan alumni are at the forefront of promoting social and environmental justice through civic action.

The Sustainable Developments Goals (SDGs) call for unprecedented efforts to overcome the challenges of working together to find solutions across divides. The 17 SDGs and 169 targets for 2030 are integrated and indivisible. This means they cannot be approached as 17 individual delegated silos, but need coordinated efforts at integration. In their comprehensiveness, the SDGs embody many of the very same unresolved internal conflicts that erode sustainability. Working together for sustainability is necessary to discover and resolve synergistic, competing, and parallel SDG targets. Across SJSU, there is rich engagement with sustainability and potential for bringing together transformative pathways to economic, social, and environmental equity and justice.

This report will describe how each division, department, college and auxiliary organization collectively works towards achieving the SDGs and preparing our students to integrate sustainability into their lives and future careers.

**The SDGs and targets are integrated and indivisible, global in nature and universally applicable.**







## SDG 1 No Poverty

*End poverty in all its forms everywhere*

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- 1.1 Eradicate poverty/create poverty reduction programs**
- 1.2 Reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions**
- 1.3 Implement social protection systems**
- 1.4 Equal rights to economic resources and basic services**
- 1.5 Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters**

SJSU has developed academic programs designed to strengthen and improve our community's social services programs. In addition to these programs that will help the community, SJSU provides basic needs programs to help alleviate living costs for students in order to assist them to successfully graduate.

### School of Social Work

The mission of the [School of Social Work](#) at San José State University is to prepare social work professionals at the generalist and advanced generalist level for effective, ethical practice and to equip students to explore, build and strengthen leadership skills and assume leadership roles from a transcultural perspective with diverse individuals, families, groups, organizations, and communities. In the service of this mission, the school is active in scholarship and professional leadership endeavors that advance the field of social work and respond to emerging and diverse needs. The transcultural perspective is infused throughout the curriculum, informing faculty scholarship, and reflecting an enduring commitment to advocating for social justice, honoring the strengths of diverse cultures, and enhancing the well-being of all.

### ***Title IV-E Program***

The [CalSWEC Title IV-E](#) Program provides professional education and monetary support to undergraduate and graduate social work students who intend to pursue or continue a career in the field of public child welfare. The Goals of the Title IV-E Stipend Program are:

- To increase the number of probation child welfare (PCW) workers in California with BASW and MSW degrees
- To prioritize the enrollment of current state/county/Tribal social services staff
- To prioritize the enrollment of students who reflect the diversity of California's child welfare population
- To provide specific program support through the provision of monetary support to students
- To provide specific program support through a specialized competency-based child welfare curriculum

## **Research and Innovation**

### ***Community-Engaged Research, Scholarship and Creative Activity (RSCA)***

SJSU researchers are working to close the equity gap for foster and homeless youth by partnering with organizations working with these communities, developing affirming behavioral healthcare for queer Californians guided by community members, and creating spaces for creative expression for at-risk youth. SJSU researchers participate in various forms of community engagement to ensure their RSCA is responsive to community needs. These approaches, from community-action research to ethnographies, ensure that researchers are advancing social justice by elevating the voices of those with whom they are working.

### ***The Child Welfare Research and Training Project (CW-PART)***

The CW-PART project is a partnership between the School of Social Work, the Title IV-E project, the County of Santa Clara, and other involved agency collaborators. Research teams of students led by a faculty member explore questions of interest to agency partners. The Title IV-E Training and Stipend Program prepares social work students for a career in public child welfare.

### ***The Research Institute for Foster Youth Initiatives***

Launched in 2009, San José State University's Research Institute for Foster Youth Initiatives (RIFYI) grew out of a critical need for research that increases the understanding of the relationship between child welfare practices and the educational and life outcomes for children and youth living in out-of-home care (which includes foster care, group care, and kin care). The Research Institute directly explores child welfare systems and practices and informs public policy makers and service providers in order to effect positive systems change.

## **SJSU Cares**

[SJSU Cares](#) provides resources and services for SJSU students facing many kinds of financial crises. This program helps students reach their academic goals by mitigating their unforeseen economic crises and providing support for housing, financial aid, counseling, food assistance. SJSU Cares has two programs focused on food assistance: the Spartan Food Pantry and CalFresh Application Assistance.

## Office of Sustainability

### **Spartan Clothes Closet**

The Office of Sustainability and SJSU Cares partnered to establish the [Spartan Clothes Closet](#), a resource for SJSU students. The Clothes Closet was created in 2021 and was designed to help alleviate two major issues: massive waste generated annually by discarded clothing and students unable to meet their basic needs.

### **Share Shelf**

The Share Shelf provides free school supplies to students. Supplies are donated surplus goods from various departments on campus. Students can come in during office hours and get anything they need free of charge.



## Poverty Under the Stars

Every year since 2006, SJSU hosts a student-led event called "Poverty Under the Stars." This event focuses on highlighting poverty and homelessness on campus and beyond by exploring solutions and calling attention to pending legislation meant to alleviate the housing crisis.



## RESEARCH INSIGHT

### Promoting permanency in families with parental substance misuse: lessons from a process evaluation of a multi-system program

by Jennifer Price Wolf, Associate Professor, School of Social Work,  
College of Health and Human Sciences

Families affected by substance misuse are at increased risk for child maltreatment and child welfare system involvement. The Enhancing Permanency in Children and Families (EPIC) program uses four evidence-based and informed multi-system practices to promote safety and permanency outcomes for children involved with the child welfare system due to parental substance misuse:

- 1) Peer Recovery Support (PRS),
- 2) Family Treatment Drug Court (FTDC),
- 3) Medications for Opioid Use Disorder (MOUD) and
- 4) Nurturing Parent Program (NPP) relational skill-building.

The purpose of this study was to identify barriers, facilitators, and lessons learned in the implementation of and client engagement with the main components of EPIC.





# SJSUCares

SUPPORTING STUDENTS' BASIC NEEDS

Financial Management  
Emergency Grant Assistance  
Temporary Housing Assistance  
Food Assistance





## SDG 2 Zero Hunger

*End hunger, achieve food security, improve nutrition and promote sustainable agriculture*

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- 2.1 End hunger and ensure access by all people to safe, nutritious and sufficient food all year round**
- 2.2 End all forms of malnutrition, including achieving the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons**
- 2.3 Partnerships with local farmers**
- 2.4 Ensure food production systems and implement resilient agricultural practice**

We power Spartans with healthy food that is seasonally relevant and sustainably sourced.

SJSU offers programs that provide food security for our students, encourage sustainable food choices, curriculum focused on sustainable aquaculture and educating our students and community on improving nutrition.

### Spartan Eats

[Spartan Eats](#) is our sole provider for food and dining services at San José State University. The organization has implemented a number of programs to address sustainable agriculture, food waste and wellness and nutrition. Imperfectly Delicious Produce (IDP) is a program that utilizes non-“retail” Grade A fruits and vegetables that have minor cosmetic imperfections. The Waste Not Campaign is a food waste reduction program used by Spartan Eats to track, measure and reduce the amount of kitchen food waste in our facilities.

By focusing on local purchasing, we are able to reduce the miles required for delivery vehicles to deliver our products. This supports the preservation of the American family farm, reducing the carbon footprint of our supply chain.

Spartan Eats was proud to become the second California State University to complete all of the requirements from Fair Trade Campaigns to become officially fair-trade certified. We sell products that are certified to seek equity in trade and create opportunities for economically and socially marginalized producers.



**SPARTAN EATS**  
CAMPUS DINING



## Campus Community Garden

The [SJSU Campus Community Garden](#) was established to provide students a space to gain access to healthy food, learn about sustainable organic garden practices and earn service learning hours. The garden exists to provide SJSU students, staff, faculty, and the surrounding community with an opportunity to participate in food justice and access to fresh and healthy food while engaging in cultural exchange and cooperation. While at the garden, SJSU members can learn the ins and outs of maintaining a small garden. SJSU members can also learn how to harvest, prune, water, and seed vegetable starts in a sustainable and environmentally friendly way.

## Spartan Food Pantry

The [Spartan Food Pantry](#) is a walk-in, full-service, staffed food assistance program offering non-perishable goods, fresh produce, and refrigerated items to eligible students.

No student should have to face food insecurity. We define those in need as students who have limited or uncertain access to nutritious and safe foods because of a lack of money and other resources.

## Department of Nutrition, Food Science, and Packaging

The [Department of Nutrition, Food Science, and Packaging](#) trains graduates for rewarding careers in settings as diverse as community organizations, educational institutions, hospitals, nutrition and research laboratories, corporations, and government agencies. In collaboration with community and industry, the mission of the Department of Nutrition, Food Science, and Packaging is to empower students through knowledge, skills, and practical experience to become qualified professionals in the fields of dietetics, applied nutrition and food sciences, food management, and packaging, so that they may serve a diverse society and expand the knowledge base of these disciplines through applied research.

## Moss Landing Aquaculture Facility

[Aquaculture](#) will be a major source of food and energy in the future. We help lead the way in developing a rigorous foundation and policy for aquaculture science and in training the workforce and leaders in sustainable aquaculture in California, the United States, and worldwide. Our new aquaculture program at MLML includes new facilities, instrumentation, personnel, and curriculum.

## Wellness & Health Inspired Student Kitchens (WHISK)

[WHISK](#) was created to provide a vetted resource for hands-on nutrition programming for the San José State University campus community. Encouraging people to take “WHISKS” in the kitchen, the program aims to give members of the community the tools needed to promote healthy food behaviors and establish healthy relationships with food. SJSU nutrition students are recruited and trained to lead the programming, providing additional practical application opportunities to complement required academic coursework. Utilizing the peer-to-peer model, WHISK emphasizes budget-friendly, plant-forward recipes that are quick and easy to prepare in order to reduce barriers to cooking and encourage fruit and vegetable intake. Developing relationships with campus community partners has been key to the development and implementation of WHISK programming. Prior to the COVID-19 pandemic, WHISK Ambassadors could be found leading demonstrations at the SJSU Campus Community Garden, hosting nutrition education presentations at the Timpany Center, running cooking classes in the residence halls in collaboration with Faculty in Residence, providing recipes and samples of food prepared from pantry ingredients for Spartan Food Pantry participants, and tabling with Fresh Approach on the Paseo, among other activities.



### RESEARCH INSIGHT

## Soul Food: [Re]framing the African-American Farming Crisis Using the Culture-Centered Approach

by Dr. Andrew Laurence Carter, Assistant Professor, Department of Public Health and Recreation, College of Health and Human Sciences

Historically, African-American farmers faced a long and challenging struggle to own land and operate independently. In recent years, several factors, including unfair policy legislation, institutionalized racism, the mechanization of agriculture, and increases in agricultural technology have exacerbated land loss and decreases in farm ownership. Currently, African-American farmers are vastly underrepresented, comprising just 2% of the nation's farmers, 0.5% of farmland and 0.2% of total agricultural sales. As a site for inquiry, this topic has been examined across many academic sub-disciplines, however, the literature has not yet explored how the erasure of the African-American farmer influences the conversation about broader diet-related health disparities in the U.S. This overlooked perspective represents a novel approach to rethinking public health interventions and may improve methods for communicating messages about healthy eating to the African-American community.



## SDG 3 Good Health and Well-Being

*Ensure healthy lives and promote well-being for all ages*

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- 3.4** Treat and promote mental health and well being
- 3.5** Prevent substance abuse
- 3.7** Ensure universal access to sexual and reproductive health-care services
- 3.9** Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 3.a** Strengthen tobacco control
- 3.b** Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries
- 3.d** Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

SJSU seeks to empower our campus community to improve health and well-being in a number of ways, including providing medical and mental health services to all students, academic programs that prepare our students in fields of medicine and public health and a robust Environmental Health and Safety program that manages our hazardous waste and curtails our air and water pollution sources.

### Healthy Campus

San Jose State University's [Healthy Campus](#) initiative (SJSU Treat Yourself Well) seeks to address impediments to student success by fostering a positive student experience both inside and outside of the classroom while supporting and embracing student well-being.

The commitments of SJSU's Healthy Campus framework are as follows: student success, health, wellness, health promotion, engagement, diversity, and community. SJSU aims to achieve Healthy Campus goals and objectives through the collaborative efforts of health, academics, student affairs, and administrative colleagues to foster healthy environments and behaviors.









## Student Wellness Center

The SJSU [Student Wellness Center](#)'s mission is to support the university by providing medical services to all registered students. The center provides health care services, including basic primary care, limited specialty care, health promotion and disease prevention, principal support services (laboratory, pharmacy, physical therapy, radiology, and nutrition), and free counseling services for all students.

The Center offers programs that focus on making responsible choices around alcohol, marijuana, tobacco and other drugs. SJSU has also adopted a 100% tobacco-free policy inside or outside any campus buildings and parking areas.

The Health Sexuality program that helps students learn how to engage in safer sex practices, foster healthy relationships, recognize signs of domestic violence, and learn about birth control and pregnancy options.

Counseling and Psychological Services (CAPS) advances personal development, enhances student learning, and addresses life crises by providing culturally inclusive mental health services and educational counseling.

Health and well-being programs that focus on physical, social, emotional, occupational, multicultural, environmental, spiritual, and intellectual wellness include Stress Reduction and Self-Care and Treat Yourself Well.

## Department of Public Health and Recreation

The SJSU Department of [Public Health and Recreation](#) (PHR) prepares leaders and practitioners who promote health and improve the environments in which we live, work, learn, and play. The program's essential mission is to provide professional education that prepares both students and graduates with knowledge, conceptual frameworks, and health education and public health competencies in order to develop programs, build community capacity, and advocate policy for health equity. The program focuses on keeping populations safe from illness and improving wellbeing for all community members. We do this through disease prevention and the promotion of behaviors, environments, and policies that contribute to health for all, reducing disparities in our health outcomes.



## Center for Healthy Aging in Multicultural Populations (CHAMP)

The mission of the [center](#) is to promote healthy aging among multicultural and diverse populations living in the San Francisco Bay Area. With faculty affiliates from all academic disciplines at SJSU, the center facilitates interdisciplinary aging research, education and training as well as strategic partnerships with community-based organizations working with older adults. CHAMP is housed in the College of Health and Human Sciences, which is home to applied and professional disciplines serving dynamic societal needs and dedicated to promoting a healthy, ethical, and enlightened global community through innovative application of knowledge and scholarship.

## Department of Biological Sciences

The Master of Science program in [Biological Sciences](#) with a concentration in Molecular Biology and Microbiology offers students training in the pursuit of rigorous scientific investigation with an emphasis on discovering the molecular mechanisms that underlie biological processes, such as behavior, cell biology, immunology, microbial diversity, microbial engineering, pathogenesis, and neural development.

## Environmental Health and Safety

### ***Hazardous Materials and Waste Program***

SJSU is committed to the protection of human health and the environment. Environmental Health and Safety collaborates with the campus community to provide consultation and training on occupational health and safety standards and the management of hazardous materials and waste.

Campus users must determine if the use of a particular hazardous chemical or product can be avoided altogether. If not, can it be substituted with a less hazardous alternative? If not, can the process utilizing the chemical or product be altered to reduce the volume and toxicity of the waste the process produces? Reducing volumes and toxicity likely results in reduced disposal costs and improves worker safety by reducing worker exposure risks. When hazardous chemicals or products must be used, SJSU aims to reduce disposal quantities through alternative disposal methods, such as recycling.

### ***Stormwater Management Program***

Stormwater runoff is excess water that does not percolate into the ground, usually due to large amounts of sustained precipitation, such as atmospheric rivers. Runoffs flow over impervious surfaces and accumulate debris, chemicals, sediment or other pollutants that adversely affect water quality. Typically, stormwater does not go to a water treatment facility and ends up depositing pollutants into the nearest waterway, killing wildlife, destroying ecosystems and contaminating drinking water sources. SJSU is committed to reducing runoff pollution. SJSU employs a number of Best Management Practices (BMPs) to improve stormwater quality that includes: street sweeping, storm drain cleaning, zero waste campaigns, and recycling programs.



## **Research and Innovation**

### ***Health Disparities***

SJSU researchers are partnering with local and national organizations to address the impacts of health disparities through intervention work in mental health, developing indexing tools for the county health department around the impacts of disparities, cataloging the enduring legacy of access to care disparities, and more.

### ***Behavioral Health***

Research in behavioral health runs the gamut from studies on how to decrease stigma in marginalized communities to studies seeking to create more culturally responsive delivery of services for greater efficacy. Furthermore, through many outreach outlets, such as the Healthy Development Community Clinic, SJSU personnel are providing services to the community.

### ***Biomedical Device Design and Development***

Bioengineers at SJSU are working on devices to improve the outcomes of diseases ranging from cardiovascular disease, the leading cause of morbidity and mortality in the U.S., to the underappreciated issue of lactation of preterm infants. Bioengineers at SJSU are investigating the role of fluid flow patterns in blood vessels and physical forces on the formation and strength of clots near heart valves, stents, and in various types of blood vessels. Efforts are also being directed to improve the surface properties of stent materials for integration with the host tissue. Various experimental techniques are complemented with computational modeling to aid in the development of better valve replacement and stent designs.

### ***Diagnostic Technologies***

Rapid screening of pathogens or early detection of disease can greatly improve industrial output (such as in food processing) or clinical outcomes (such as cancer or sepsis). Investigators in the College of Engineering are using microfabrication and microfluidics tools to develop rapid, robust, and inexpensive biosensors for identifying very low levels of food contamination and infectious biofilms sorting very small amounts of abnormal or unhealthy cells among a large number of normal cells, and developing new blood-based biomarkers for diseases with no known molecular tests, such as chronic fatigue syndrome.

## **Integrated Behavioral Health Training Grant and Stipend Program**

The [IBH Program](#) prepares social work graduate students for professional practice in integrated health care settings, serving clients of all ages.





## RESEARCH INSIGHT

### The Santa Clara County Health Equity Agenda

**by Dr. Vicky Gomez, Assistant Professor, Department Public Health and Recreation, College of Health and Human Sciences**

The COVID-19 pandemic has reified and exacerbated historical and structurally-rooted health inequities across the country. In Santa Clara County, the pandemic and its wider impact has had a disproportionately negative impact on the health of Black, Latinx/a/o, and low-income communities — particularly in East San Jose, Gilroy, and pockets throughout the County. To address this crisis, Santa Clara County Supervisor Cindy Chavez proposed the establishment of a Health Equity Agenda in June 2021. The goal of the Agenda is to establish a steering committee of county leaders, determine key health equity metrics for the County, and propose recommendations to address health inequities.

The Health Equity Agenda constitutes a multi-year, four-phase plan to develop, implement, and evaluate countywide health equity interventions over the next 5–10 years. Mirroring national and global calls to incorporate intersectional and intersectoral approaches in addressing health inequities, the Health Equity Agenda represents an important step toward improving and, ultimately, rectifying structural health disparities experienced by local Santa Clara County residents.





## A Transformative University



Most Transformative University



Best Value



Top Public Schools



Top Performers for Social Mobility



Undergraduate Engineering Programs



Business Programs



Computer Science Programs



Undergraduate Nursing (BSN) Programs



College for Veterans



STARS Top Performers (Sustainability)



## SDG 4 Quality Education

*Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*

- 4.1** Ensure that all girls and boys complete free, equitable and quality primary and secondary education, early childhood development care and pre-primary education.
- 4.3** Ensure the availability of affordable and quality technical, vocational and tertiary education, including university.
- 4.4** Increase the number of students who have technical and vocational skills for employment, decent jobs and entrepreneurship.
- 4.5** Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable.
- 4.6** Ensure literacy and numeracy for all youth.
- 4.7** Ensure that all learners acquire the knowledge and skills needed to promote sustainable development.
- 4.c** Increase the supply of qualified teachers.

SJSU is ranked #1 “Most Transformative University” in the nation.

Since 2020, SJSU has been ranked the #1 “Most Transformative University” in the nation by Money Magazine, which is based on the value-added scores for graduation rates, earnings, and student loan repayment. 62% of our students receive grants and 86% of student need is met. Making college affordable, providing academic support for first-generation and lower-income students, and alleviating the financial burden of a high quality education, are some of the most important priorities for SJSU.

Money magazine also ranked SJSU a 4.5 out of 5 stars in their Best Colleges rankings — putting SJSU in the top 5% in the U.S. focused mainly on quality, affordability, and student and graduate outcomes.

[U.S. News and World Report's 2024 Best Colleges](#) ranked SJSU the #1 public university in the West for best value, #3 Most Innovative School, #3 for Best Colleges for Veterans, #7 in Top Performers on Social Mobility, and #3 among public universities in the West for campus ethnic diversity.

SJSU offers academic programs that prepare our students for careers in education with an emphasis on equity and racial justice. Many services are offered to encourage the academic success of our students who may be economically, physically, or educationally disadvantaged. Several departments offer programs that foster lifelong learning opportunities to our campus communities, including events and programs that promote learning about sustainability.



## Financial Aid and Scholarships

The Financial Aid and Scholarship Office (FASO) not only administers federal and state grants and loans but also manages the Spartan Scholarship program. The Spartan Scholarship program oversees the scholarships that each college offers, aimed at rewarding academic excellence and helping finance the ever-increasing costs of higher education. Programs such as the A.S. Affordable Textbook Program, financial literacy education programs, and the Alumni Association Scholarships also help students make education at SJSU more affordable and accessible.

## Connie L. Lurie College of Education

The [College of Education](#) has grown enrollments in our traditional programs and launched exciting new institutes and programs that extend our reach to new student populations, professionals and communities. We've strengthened our commitment to educational equity and racial justice by investing resources in bold emancipatory initiatives and tackling structural challenges within the college, including the Institute for Emancipatory Education, the Early Childhood Institute, Bilingüismo y Justicia, and the STEM + C Institute. These projects position Lurie College to lead our regional P-20 educational ecosystem and to be a model nationally for truly transformative colleges of education.

We've grown enrollments across our college, particularly in our credential programs, where we've seen our student population grow by 31% over the past year. We are particularly proud that these overall increases also represent a significant increase in diversity. Additionally, 38% of our students identify as Latinx/a/o or Hispanic. Our enrollment in our critical bilingual teacher authorization program has also grown by more than 500% over the past three years, and we've extended bilingual program options to include Spanish, Vietnamese, and Mandarin through collaboration with the California State University-wide Asian Language Consortium.

In addition, we launched two new programs with bold transformative visions – an MA in Emancipatory School Leadership in partnership with the Santa Clara County Office of Education and an Ethnic Studies Residency program in partnership with the East Side Union High School District. We also reformed our admissions and advising processes and redesigned curricula in our existing programs to ensure consonance with the inclusive, antiracist, equity-focused, justice-driven values of our college.

### ***Institute for Emancipatory Education***

Too many of our P20 students are marginalized and/or multiply-marginalized based on race, class, national origin, language, gender identity, sexual orientation, disability, and neurodiversity. For decades, we have been tinkering around the edges, providing patchwork programs and band-aid solutions, but our core educational systems continue to perpetuate inequity and injustice. An emancipatory approach will challenge our epistemic framework, prioritize learning in partnership with community, and radically reimagine systems to center historically marginalized perspectives.

The [Institute for Emancipatory Education \(IEE\)](#) at San José State University (SJSU) will facilitate community-engaged research and advance emancipatory pedagogies that support the redesign of learning from preschool through post-secondary. As a result, we will support the development of equitable and inclusive educational systems that nurture the creativity and brilliance of all learners so that our diverse, democratic society can truly thrive.

### ***Early Childhood Institute***

Recognizing the potential each and every child brings into the world, SJSU's [Early Childhood Institute \(ECI\)](#) seeks to transform the field of early learning and care through impactful research, training, and advocacy efforts that promote equitable, high-quality, and inclusive early learning and care settings to benefit all children. Through their research, professional development, and advocacy work, they have been increasing the capacity to provide research-informed, community-focused, professional learning experiences to early childhood educators in the region.

### ***Bilingüismo y Justicia (Critical Bilingual Authorization Pathway)***

The SJSU Lurie College of Education [Critical Bilingual Authorization Pathway \(CBAP\)](#), Bilingüismo y Justicia, prepares teachers to obtain an authorization to serve in dual immersion or bilingual school settings in California. The pathway specializes candidates in pedagogy, practices, and ability to identify linguistic assets and potential for students and empowers candidates to be changemakers in their own context.

### ***STEM + C Institute***

The SJSU Lurie College of Education [STEM + C Institute](#) has created summer opportunities for current credential candidates, SJSU alumni, future SJSU credential candidates, and teachers in partner districts to develop their knowledge, skills, and abilities to teach math, science, and/or computer science in an effort to pursue educational equity and social justice by reducing STEM barriers in education. Teachers can follow one of three pathways leading to a foundational-level math credential, a foundational-level science credential, or a computer science supplementary authorization.

### ***Institute for Regenerative Futures***

The [Institute for Regenerative Futures](#) is an intergenerational community-based collective of Black and other Indigenous co-conspiratorial educators, elders, healing practitioners, memory workers (researchers) and beloved community. Our collective emerged through timely intersections of community engagement, education, and research that highlight the psychological, emotional, and physiological impacts of anti-blackness and colonization. We are connected in our efforts to counter the forces that destabilize our self-determination, and we are rooted in educational pathways towards futures that are in the right relation with our ancestral and cultural ways of being and knowing. We seek to regenerate futures through memory, research, grounded practice and service.

### ***M.A. in Emancipatory School Leadership***

The SJSU Connie L. Lurie College of Education's [Master's in Educational Leadership, Concentration in Emancipatory K12 School Leadership](#) is designed for emerging K-12 school leaders who wish to engage with emancipatory leadership practices to improve educational opportunities for historically marginalized students. This program will prepare school leaders through deep engagement with research and practice through applied consulting on living case studies. Emancipatory K12 school leadership approaches create organizational cultures to reflect the diversity of experience and knowledge within school communities through collaborative approaches to deconstruct power systems, challenge inequitable practices and policies, and cultivate community cultural wealth.

### ***Ethnic Studies Residency Program***

Ethnic Studies helps students connect with their power by highlighting the strengths in their personal, community, and cultural backgrounds. The [Ethnic Studies Residency Program \(ESRP\)](#) pairs teacher candidates with dynamic mentor teachers in our local schools with a commitment to being transformative educators. Through ongoing, practice-based professional development, the ESRP supports residents and their mentors in cultivating the mindsets, knowledge, and skills to turn their classrooms into spaces of solidarity and liberation. ESRP workshops, led by program faculty and invited authors and experts in the field, guide candidates through the process of inquiry that leads to their Masters of Arts in Teaching (M.A.T.). In addition, ESRP residents may be eligible for tuition stipends from the college or district.





## Dr. Martin Luther King, Jr. Library

The Dr. Martin Luther King, Jr. Library (King Library) provides lifelong learning measures for our students, staff, faculty and the San José community ranging from public events, educational outreach activities, and public resources as well keeping a virtual and physical library of journals, articles, databases, textbooks, and books available to all.

The Jennifer and Philip DiNapoli exhibit gallery is aimed at hosting educational, cultural, and thought-provoking art exhibits year round.

## Open University

The [Open University](#) program allows students who haven't been accepted at SJSU to enroll in university courses on a space-available basis. It's a way for these students to attend San José State University to take individual courses to earn credits while waiting for admission. It's also an opportunity for individuals to take college courses without enrolling in the university to grow professionally, enrich their lives, prepare for a career change, or give university life a try. Former San José State University students, SJSU alumni, members of the general community and disqualified students from SJSU or elsewhere may take courses.

## Student Affairs

The [Accessible Education Center](#), through collaboration with the campus and community, is committed to redefining ability for students with disabilities by providing comprehensive services in support of the educational development and success of students with disabilities in a student-centered and professional environment. The Accessible Education Center will be known for promoting disability as an essential element embedded in the fabric of diversity through 'Ability Redefined.'

The [Educational Opportunity Program \(EOP\)](#) is designed to improve student academic support of first-generation, low-income, and educationally disadvantaged students. The program provides admission, academic, and financial assistance to EOP-eligible undergraduate students considered California residents or AB540 students.

## SJSU Online

SJSU is the first CSU to offer undergraduate degrees that are 100% online, empowering Californians who have earned some college credits to return and complete their bachelor's degree. Over 2.5 million Californians ages 25–54 have attended college but have not completed a bachelor's degree, according to California Competes. [SJSU Online](#) empowers adults to earn their bachelor's degree through 100% online programs designed around their busy lifestyles. In doing so, SJSU Online will enable them to accomplish their goals, advance their careers, increase their earning potential and foster a sense of pride for themselves and their families.



## Spartan East Side Promise Program

The [Spartan East Side Promise Program \(SESP\)](#) is San Jose State University's dedicated support service for East Side Union High School District students from the time of college exploration through college graduation. We provide a variety of academic, personal, and professional development workshops and events that strive to foster a college-going culture by creating a pathway to admission to SJSU and supporting ESUHSU students and their families in their transition from high school to college.



## Financial Aid

In addition to the federal and state grants and loans available to all students, each SJSU college also offers scholarships, many of which are dedicated to students with demonstrated financial need or Dream Act students. Some scholarships are focused on supporting students from underrepresented groups and first-generation students. Some examples of scholarships are:

The [William and Charlene Glikbarg Scholarships](#) are \$2,500 scholarships for students in the Lurie College of Education Teacher Credential program with demonstrated financial need who plan to teach in a low-income, ethnically diverse community or teach low-income, ethnically diverse students.

The Gary Radine Scholarships are for students with majors in the College of Business who are enrolled full-time, demonstrate involvement in the Hispanic community, and have a financial need.

Robert P. Oates President's Scholarship is for students in Mathematics, Computer Science or the Physical Sciences, with a preference for incoming freshmen who are first-generation college students or students who have been successful in their freshman year.

## Office of Sustainability

The Office of Sustainability works with all campus departments to minimize SJSU's ecological footprint by reducing campus energy consumption, water use, and waste. The office promotes awareness and education of sustainable development through a variety of avenues including:

- Social media platforms @SJSUGreenCampus, quarterly podcasts and newsletters
- Sustainability in Curriculum Development Workshops
- Sustainability in Art Contests
- How to obtain LEED Certification workshops
- Green Dorm Certification and Green Office Certification programs

Campus Sustainability Month 2022 in October was held on campus for the first time since the pandemic. Educational and informational workshops like "The Climate Crisis," "Building a Sustainable Closet," and

# CAMPUS SUSTAINABILITY MONTH

[bit.ly/SJSUSustMonth2022](https://bit.ly/SJSUSustMonth2022)







the “Green Office Workshop” were offered to the campus community. A Plant Swap was held in partnership with the Community Garden to teach students about how to grow their own plants.

Additionally, the first Climate Change and Sustainability Fair was organized by the Campus Reading Program, the SJSU Office of Sustainability and the Sustainability Faculty in Residence to explore the impacts of climate change and what SJSU is doing to reduce its environmental impact. Senator Dave Cortese gave the keynote and over 35 organizations tabled, educating students and the campus community on sustainability programs and efforts of SJSU.

Every April, SJSU hosts Earth Month, offering a variety of events that promote sustainability-focused themes like the annual Green Career Panel, Legacy of Poetry Fest, a GreenTalk Speakers Series, and a film screening for the documentary “Eating our Way to Extinction,” where the Office of Sustainability was presented with a Certificate of Recognition from the California Legislature Assembly for raising awareness of environmental and health issues.

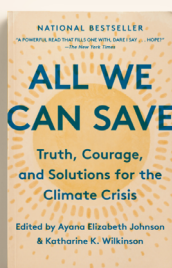
Additionally, a Sustainable Art Gala was held in April 2022 and April 2023, each one highlighting the student-led art magazine, Meatspace. Their spring issues were focused on sustainable development topics: the spring 2022 issue titled “Consumerism and You” focused on how consumerism and companies affects many aspects of society and the spring 2023 titled “Greener Pastures” focused on how a future would look if we developed our structures, cities, and technologies in unison with nature.

The 2023 Earth Day Resource Fair was the culminating event of Earth Month, held on Tower Lawn and included a Sustainable Fashion Show, a tree planting and dedication to Dr. Jennifer Hartle, Aztec dancers, a performance by the SJSU Marching Band, and free vegan food. SJSU and outside organizations set up tables to teach students about a broad range of topics like gardening, composting, recycling, climate change and volunteer opportunities.

## SJSU Campus Reading Program

SJSU's [Campus Reading Program](#) fosters a culture of reading that helps orient first-time freshmen to college life while engaging all community members in campus-wide discussion and reflection on important issues of our time. The 2022-2023 Campus Reading Program Book Selection of

***All We Can Save: Truth, Courage, and Solutions for the Climate Crisis*** was SJSU's Campus Reading book for the fall 2022 incoming class of first-year students. ***All We Can Save*** is a collection of essays, poetry, and art that serves as “both a balm and a guide for knowing and holding what has been done to the world, while summoning truth, courage, and solutions to turn away from the brink and toward life-giving possibility.” The Campus Reading Program held multiple events throughout Fall 2022 that focused on sustainability and Indigenous rights. In October 2022, the Campus Reading Program, in collaboration with units across campus, community non-profits, and government agencies, hosted the first Climate Change & Sustainability Fair, and using the book as inspiration, was themed “Cool Solutions for A Warming Planet.”



## School of Social Work

### Pupil Personnel Services Credential (PPSC)

The PPSC is a California credential that prepares social work graduate students for professional practice in K-12 school settings. Graduates of the credential will be able to:

1. Design culturally sustaining prevention and intervention counseling programs within educational environments
2. Model ethical and inclusive leadership skills that promote equity, social justice, and student success
3. Apply effective and inclusive assessment practices within their work with school and community stakeholders
4. Create social, cultural, and educational interventions that support students' academic advancement
5. Select and apply relevant research methods to conduct program evaluations, supported by effective technological applications

## Transforming Science Teaching and Learning through



### RESEARCH INSIGHT

## Empowering Teachers and Students as Climate Justice Action Researchers and Change Agents

by Dr. Tammie Visintainer, Assistant Professor, Teacher Education,  
Connie L. Lurie College of Education

This project supports school-based science teachers and students in conducting community-based science research on the causes and effects of extreme heat/urban islands in racially and ethnically diverse communities. Doing research of this nature in schools is important, as students' opportunities to engage in community-based science research usually occur in out-of-school contexts. Teachers will participate in professional learning experiences that support their development of content knowledge, scientific research practices, and critical pedagogies needed to design and implement research projects in their classroom. Students will identify locally-relevant issues related to this phenomenon, conduct investigations to explore the issue, share their findings through arts-based community narratives, and advocate for change. This project will broaden access to empowering youth-centered approaches that support learning and identity construction in science. Educational activities culminating from this research include the development of a graduate-level course focused on climate justice action research as well as curricular materials for K-12 classroom use by teachers and students. The program supports projects that advance racial equity in STEM education and workforce development through research and practice.

The research will aid in the development of a hub for justice-centered science education and will also yield school-based materials and professional development activities that examine the interwoven nature of climate justice and racial justice. Further, project findings will support a transformative science teacher education model that empowers teachers as designers, equity advocates, and leaders in community-engaged science research.



## SDG 5 Gender Equality

*Achieve gender equality and empower all women and girls*

- 5.1 End all forms of discrimination against all women and girls**
- 5.2 Eliminate all forms of violence against all women and girls**
- 5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies**
- 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life**
- 5.6 Ensure universal access to sexual and reproductive health and reproductive rights**



Ensuring the safety of our campus community is one of the university's highest priorities, and addressing sex- and gender-based discrimination and harassment is central to that aim.



- Peter Lim, Interim Title IX and Gender Equity Officer

SJSU offers a Women, Gender, and Sexuality Studies Program and services that provide support for our students, faculty and staff in issues related to gender, gender identity and sexual orientation.

In the summer of 2023, two reports were published that included recommendations on how to improve our Title IX office. These recommendations, detailed below, have been implemented or will be in the near future.

### Student Affairs

#### **The Gender Equity Center**

The [Gender Equity Center \(GenEC\)](#) advocates for social justice, respect, and safety for all members of the San José State University community through an intersectional lens by educating on issues experienced by people because of their gender, gender identity, and/or perceived gender/gender identity. The GenEC provides dynamic programming and educational outreach opportunities through collaborative partnerships with other campus and community organizations. The GenEC works to empower individuals with the tools and skills they need to successfully complete their educational goals and become leaders in the community.

#### **The PRIDE Center**

The [PRIDE Center](#) supports the LGBTQ+ (Lesbian, Gay, Bisexual, Transgender, Intersex, Queer, Questioning, Asexual, Nonbinary, etc.) students of San José State University. Through dynamic programming and educational outreach the PRIDE Center seeks to improve the campus climate for LGBTQ+ students and advocate for the respect and safety of all members of the campus community. In collaboration with other campus programs, the center works to meet the needs of students to promote the successful completion of their educational goals.

## Title IX and Gender Equity Office

SJSU's [Title IX and Gender Equity Office](#) is committed to protecting all people regardless of their gender or gender identity from sex discrimination, which includes sexual harassment, sexual misconduct, dating/domestic violence, stalking, pregnancy discrimination and discrimination based on pregnancy-related conditions. Improvements to respond promptly and equitably to reports include significant increases in staffing; a new and improved office location; faster responses to new reports; the development of pamphlets, informational items, and flowcharts that explain and demystify

our services; improvements to the quality and timeliness of investigations; enhanced educational programming; an increase in the number of Title IX trainings delivered; a much improved website; the standardization of internal protocols and practices; more subject-matter training for all Title IX staff members; and a focused marketing campaign to raise awareness about our office and its services. The most substantial improvement will be to combine the Title IX office with the Discrimination, Harassment, and Retaliation (DHR) programs into one office.



## Student Wellness Center



Primary care related gynecological services are available to all SJSU students. We have physicians and nurse practitioners trained in routine gynecological care and examinations, including screening and treatment of sexually transmitted illnesses (STIs), information and education on sexuality, birth control methods, and menopause.





The [Campus Survivor Advocate](#) provides confidential individual and group sessions for people impacted by sexual violence, intimate partner violence, stalking & harassment. This program provides emergency and support services to ensure the well-being and safety of survivors and crisis intervention and advocacy for students, faculty and staff.

## Women, Gender, and Sexuality Studies Program

The [Women, Gender, and Sexuality Studies Program](#) is offered through the Department of Sociology and Interdisciplinary Social Sciences. The program is committed to interdisciplinary scholarship and teaching based on global feminist frameworks. WGSS curriculum investigates how lives are shaped by gender and gender identity, race, class, sexuality, and national identity. The program emphasizes the importance of understanding gender as integral to social and political structures of power. Students will obtain skills to cultivate critical thinking, dialogue, coalition building, appreciate diversity, and contribute to social change based on feminist frameworks.

## Queer Educators and Counselors Network

The [Queer Educators and Counselors Network \(QECN\)](#) at the SJSU Lurie College of Education creates a safe and affirming space for educators, counselors, and students to appreciate diversity in sexual and gender identities. We also provide support, training, and resources to help students, faculty, and staff examine their own practice and engage with their own understandings of gender and sexuality. Through individual and group support, professional development opportunities, research activities, and advocacy, we hope to empower our community and world.



### Characterizing Gendered Socialization of Early Career Civil Engineers to Promote Inclusive Practices and Retention of a Diverse Workforce

by Kacey Beddoes, Project Director, College of Engineering

There is a pressing need to better understand the high rates of attrition from engineering careers, particularly within their first decade on the job. Therefore, this project will examine the organizational socialization of newcomer civil engineers and will focus specifically on how the socialization process is gendered in ways that contribute to attrition from the profession. It will build on a previous longitudinal study on the same topic and will continue the long-term work of developing processes of acculturation to the engineering profession that are compatible with intersecting non-normative identities by refining and expanding an empirically-supported and engineering-specific model of gendered socialization. The integrated education and research plan will yield a dramatic impact on the field of engineering education by prioritizing the importance of underutilized gender theories, enrolling men in gender research and systems change, and addressing the gap in research on engineering workplaces. Other than the original study that this project builds on, no existing research has systematically examined the gendered organizational socialization experiences of newcomer men and women engineers. Ultimately, this project will facilitate greater equity in the socialization of newcomer engineers in order to decrease attrition from engineering careers and broaden participation of underrepresented groups in engineering. Furthermore, this project will contribute simultaneously to the fields of engineering education, engineering studies, organizational studies, and gender studies, among others.









## SDG 6 Clean Water and Sanitation

*Ensure availability and sustainable management of water and sanitation for all*

- 6.1 Achieve universal and equitable access to safe and affordable drinking water for all**
- 6.2 Ensure access to adequate and equitable sanitation and hygiene for all**
- 6.3 Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally**
- 6.4 Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater**
- 6.5 Implement integrated water resources management at all levels**
- 6.6 Protect and restore water-related ecosystems**
- 6.b Support and strengthen the participation of local communities in improving water and sanitation management**

SJSU has been named a [Water Conservation Champion](#), a [Silicon Valley Water Conservation Awardee](#) and a [Customer of the Year](#) by WateReuse California.

Recycled water is a resource provided by Santa Clara County that reduces demand on our fresh water sources. SJSU has been at the forefront of recycled water use for over 20 years and continues to embrace and expand recycled water usage on our Main and South Campuses. Additionally, programs in our College of Engineering and the Moss Landing Marine Labs offer programs that deal with sustainable water management and pollution mitigation.

### Facilities Development and Operations

#### **Recycled Water Usage**

SJSU was the first California State University and one of the first organizations in the state to convert their cooling towers from potable to recycled water. In 2000, when SJSU received

approval to undergo this conversion, the City of San José and the San José/Santa Clara Water Pollution Control Plant commissioned guidelines for businesses and organizations for converting their cooling towers to recycled water using the SJSU cooling towers as the case study.

Since 2000, the campus has converted the other major water uses to recycled water: irrigation for landscaping on both the South and Main campuses, followed by our steam make-up water for our steam plant. Starting with the Dr. Martin Luther King, Jr.





# RECYCLED WATER INNOVATION AT SAN JOSÉ STATE UNIVERSITY

## FOCUS ON EFFICIENCY

*Over the course of 20 years, San José State University has worked with public agencies to engineer and install a recycled water system, which both supplies the university and serves as a model for other such projects.*

San José State University was the first California State University and one of the first organizations in the state to convert their cooling towers from potable to recycled water. In 2000, when SJSU received approval to undergo this conversion, the City of San José and the San José/Santa Clara Water Pollution Control Plant commissioned guidelines for businesses and organizations for converting their cooling towers to recycled water using the SJSU cooling towers as the case study.

This project has spanned two decades, and South Bay Water Recycling – the agency created to oversee the recycled water system in the south Bay Area – continues to use the university’s system as a case study and the SJSU cooling towers for site visits with potential new customers, who include other colleges and universities, commercial buildings, industrial sites, and data centers.

The objectives of this project included:

- Switching the boiler water feed from potable water to recycled water for more sustainable use of water resources.
- Testing the boiler make-up water (fresh water added to the process to augment water lost through a variety of ways, like evaporation, leaks or humidification) system using a recycled water feed to determine if the current reverse-osmosis pretreatment steps and reverse-osmosis system can provide reliable treatment to meet SJSU’s water quality goals.
- Evaluation and leverage of new technology to reduce energy use and operations costs.
- Increasing the system recovery to reduce the volume of waste streams.
- Maintaining a high level of water quality to meet the boiler feed requirements.

## MILESTONES

2000

- Recycled water use is approved at SJSU’s central plant. It is used as make-up water for the campus chiller plant’s cooling tower and replaces the softened potable water used previously.
- Recycled water use for general irrigation of playing fields at SJSU’s South Campus is approved by South Bay Water Recycling and San José Water Company.

2003

- The first dual-plumbed building is constructed on campus at the Martin Luther King Jr. Library.

2005

- SJWC installs an 18-inch recycled water main running east-west on San Fernando Street from 12th Street to just beyond 9th Street to serve San Jose City Hall and King Library.

2011

- Main campus irrigation is converted to reclaimed water.

2014

- The Student Union undergoes a major retrofit and expansion, including the addition of a dual-plumbed system.

QUANTIFICATION AND RESULTS

Total water savings annually is almost 100 million gallons.
Recycled water for irrigation averages more than 70,000 hundred cubic feet (HCF, the most common unit of water measurement and represents 100 cubic feet, which is equivalent to 748 gallons).
Recycled water for indoor non-potable use currently averages more than 8,500 HCF annually. With the addition of new buildings in the next two to three years, the university's recycled water usage will increase by approximately 12,000 HCF.
Recycled water for the cooling towers averages more than 22,000 HCF annually.
Recycled water steam make-up saves approximately 29,000 HCF annually in potable water usage.

IMPACT AND BENEFITS

The use of recycled water for boiler feed at the Central Plant eliminates the single remaining largest potable water usage at San José State University. Use of reclaimed water as a source for steam make-up is an ambitious technical challenge due to the high purity required. SJSU saves almost \$850,000 every year by using recycled water instead of potable water.
Water savings allows the potable water to remain as groundwater, which is particularly valuable when surface water supplies are limited during drought.
The San José/ Santa Clara Water Pollution Control Plant discharges treated wastewater into the surrounding San Francisco Bay salt marsh habitat. This prevents converting the saltwater marsh to a fresh-water marsh and protects the habitat, including two endangered species native to the area.
Gaylord Nelson was one of the most prominent environmental stewards, founder of Earth Day, and graduate of SJSU. In the present day, as more and more of the approximately 35,000 students are becoming concerned about the environment, having recycled water for irrigation, chilling, heating and dual plumbing sets an example for environmental stewardship. Students in majors from engineering to environmental studies are learning about water conservation in their classrooms, from local and state governments, and can see it in practice on campus.
The Central Plant staff gives student tours each semester to show how innovation and teamwork can bring positive and lasting environmental change.

2015

- SJSU begins installation of a new recycled-water main running east-west on San Carlos Street from 10th Street to 4th Street to serve the rest of the campus. The project is financed by the campus with the intention of donating the main to South Bay Water Recycling at the completion of the project.

2016

- Campus Village 2 is completed and is the first building on the main connection. The main will service the Spartan Complex, Student Health and Counseling, and the Student Recreation and Aquatic Center.

2017

- Make-up water is converted to the university's existing boilers, which generate steam from potable water to recycled water, using the university's existing reverse-osmosis equipment.

2018

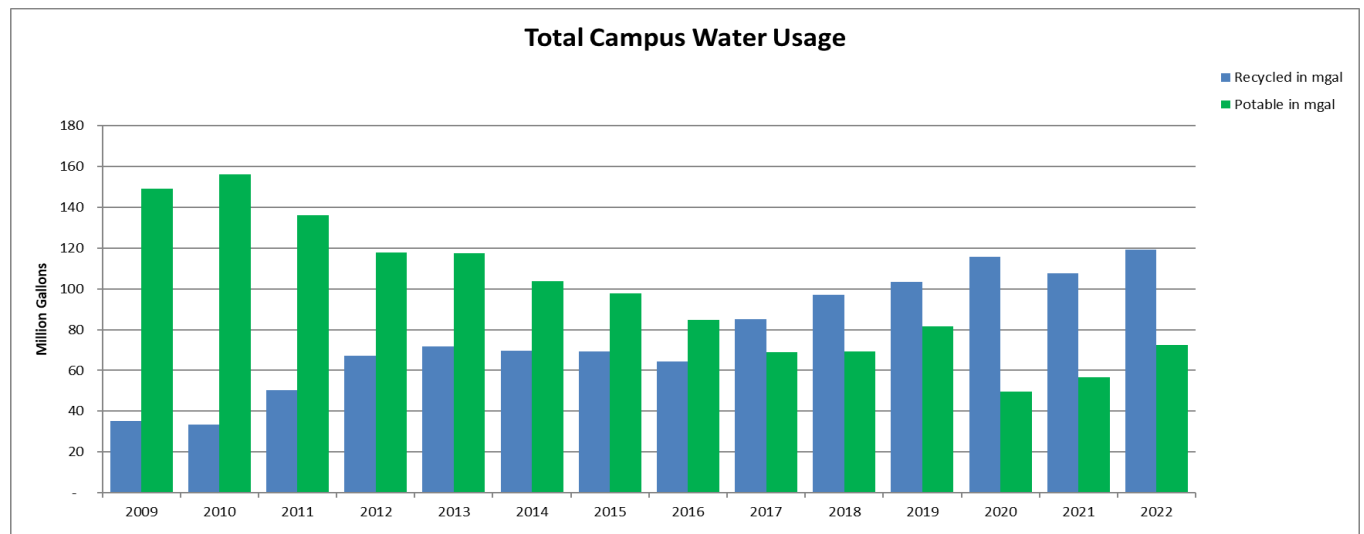
- A new reverse-osmosis system is designed and implemented; it includes duplex media filters and reclaimed water pre-treatment complete with coagulant mix tank, filtered water tank, chemical feed system, pumps and pipelines within the central plant, and improvements to the plant's mixed bed softener and reverse-osmosis/ direct-input membrane system.

2019

- The remaining new buildings with dual plumbing are connected to the completed recycled water main pipeline.



Library, all new buildings have dual plumbing, allowing recycled water to be used in toilet flushing. The amount of potable water used on campus has been reduced by 55 percent since 2013. Today, we use more recycled water than potable water, saving almost 100 million gallons of potable water each year.



### **Stormwater Treatment and Bioswales**

Stormwater runoff, defined as rainwater that flows over impervious surfaces, is both an under-harnessed groundwater resource and the leading contributor to water body impairments due to the number of pollutants it can transport. One widely successful strategy to capture and treat stormwater runoff is to construct bioswales, which collect rainwater and filter it while the water percolates into underground reservoirs. Bioswales are located in front of the Student Wellness Center, in front of the SPX building, the Student Union and the Student Recreation and Aquatic Center.

Additionally, porous concrete has been installed in various locations around campus. The use of porous concrete reduces the risk of flash flooding, minimizes stormwater runoff to surrounding waterways, and allows natural filtration to recharge local groundwater supplies.

The Environmental, Health and Safety Department maintains the campus' well water system and distribution lines. These wells, when operational, will be tested annually and distribution lines are tested on a weekly basis to ensure compliance with state and federal drinking water standards.

### **Civil and Environmental Engineering**

Civil engineers plan, design and supervise construction of water supply and distribution systems, wastewater collection systems, highways, bridges, buildings, drinking water treatment plants, wastewater treatment plants, and help solve local and regional pollution problems. They design and test structures that probe the limit of knowledge from the frontiers of space to the depths of the ocean. Our graduates from this program are employed in non-profits, government agencies and companies that are influential in maintaining clean water, sanitation for our local, state and national communities.

At the graduate level, students can choose to specialize in Environmental Engineering, which focuses on wastewater treatment, water treatment, industrial and hazardous waste management and treatment, Engineering for the Environment (pollution prevention and environmentally-conscious engineering), and Water Resources Engineering.

## Marine Pollution Studies Laboratory at Moss Landing

The [Marine Pollution Studies Lab](#) at Moss Landing Marine Laboratories (MPSL-MLML) has played a leading role in California's coastal monitoring and assessment since the early 90's with the State Water Resources Control Board's Bay Protection and Toxic Cleanup Program (BPTCP) and the EPA's Environmental Monitoring and Assessment Program (EMAP).



## College of Humanities and Arts

The College of H&A, curated and organized by Molly Hankwitz, lecturer in the Art and Art History Department, held an event to mark World Water Day 2023 to bring together art and science. The event included a panel discussion titled ["Life of Water/Water is Life"](#) covering climate change in the form of extreme wet weather and living in extreme environments at both ends of the water spectrum. Presenters included Environmental Studies Department Chair Katherine Cushing, Assistant Professor of Environmental Studies Costanza Rampini and Sustainability Program Lead Debbie Andres, discussing the state of water resources in California and Santa Clara County and campus conservation. There were also two esteemed faculty presentations: The Gila Rivery Project, an experimental art and science venture in Arizona conducted by L&J Ranch, Professor Emeritus Joel Slayton; and Dr. Lisa Johansen and Professor Robin Lasser from the Department of Art and Art History, speaking on her body of work *Swallowing Fire/Breathing Water*, which illustrates how native Californian excursions through fire and water are more than amazing for their deeply creative philosophy and personal engagement.



## RESEARCH INSIGHT

### Moral Economies in Water Markets: Implications for Understanding Human Responses to [Water Insecurity](#)

by Dr. Melissa Beresford, Assistant Professor, Department of Anthropology, College of Social Sciences

Half of the world's population will live in water-stressed conditions by 2040. To manage water insecurity, many communities will increasingly need to rely on mobile, adaptable, and decentralized water infrastructures, such as private water vending, rather than on centralized public systems alone. In the coming years, it will be crucial to understand how market-based infrastructures can be designed to uphold local notions of water justice and advance the Human Right to Water. This CAREER project will examine when and how communities mobilize market-based moral economies to manage water insecurity in ways they consider to be fair and just. Moral economies are normative economic institutions in which shared notions of justice obligate individuals to provide access to vital resources. While scientists have documented reciprocity-based moral economies as a key human response to resource insecurity, we have little understanding of when and how people may use market-based moral economic arrangements to manage water insecure conditions within contemporary capitalist contexts. In Phase 1 of the project, the researcher will ethnographically examine private water vending in a major U.S. water insecurity hotspot to understand if and when market-based moral economies for water arise. In Phase 2, the researcher will explore the generalizability of these findings through a cross-cultural study of market-based moral economies in six global sites.



## SDG 7 Affordable and Clean Energy

*Ensure access to affordable, reliable, sustainable and modern energy for all*

- 7.1 Ensure universal access to affordable, reliable and modern energy services**
- 7.2 Increase substantially the share of renewable energy in the global energy mix**
- 7.3 Ensure energy efficiency**
- 7.a Enhance international cooperation to facilitate access to clean energy research and technology**
- 7.b Expand infrastructure and upgrade technology to help supply modern and sustainable energy services for all in developing countries**

The Energy and Utilities team achieved a major milestone with the completion of the south campus solar PV project at the Park and Ride lot.

Clean energy is energy that comes from renewable, zero emission sources that do not pollute the atmosphere when used, as well as energy saved by energy efficiency measures. The College of Engineering and the Department of Environmental Studies offer acclaimed programs in clean energy, sustainable energy systems and green building design. Our campus has recently installed solar panels on all available buildings at the Main Campus and South Park-and-Ride lot, making our campus a living lab.

### Facilities Development and Operations

#### **Solar Powered Campus**

Photovoltaic solar panels, along with a covered carport, were installed on roofs at the Park-and-Ride lot on South Campus to provide renewable energy to the campus. The installation provides 480kW of power, making South Campus net zero energy.

The Main Campus is now generating 1.27 MW of solar power after installation of the solar panels on top of 10 campus roofs: the Art Building, the Business Complex, Clark Hall, MLK Library, the Music building, the Student Wellness Center, Spartan Complex, the Student Recreation and Aquatic Complex, Sweeney Hall, and Yoshihiro Uchida Hall.

The panels are expected to lower our carbon footprint by 511 metric tons of carbon dioxide equivalent.

### Department of Environmental Studies

The ENVS department offers an undergraduate minor in [Sustainable Energy](#), focused on solar power, green building design and sustainable energy.









## College of Engineering

### Electrical Engineering Department

We are a department that advances with the progress of technology. We collaborate with Silicon Valley companies to bring up-to-date technologies into our curriculum and provide courses that prepare our students for the Electrical Engineering discipline. Companies can benefit from partnering with our faculty and students by creating synergies that leverage academic exploration and industry experience. Academic-industry collaborations produce results that give industry partners an edge in today's market and on tomorrow's new frontiers. The core strengths of our faculty and curriculum include semiconductor electronics; wireless communications; machine learning; network security; image and signal processing; analog, digital and mixed-signal circuits; embedded systems; control and robotics; power electronics; and sustainable electric energy systems.

### MSE Specialization in Smart Sustainable Energy Systems

The College of Professional and Global Education offers an MS Engineering program that specializes in Smart Sustainable Energy Systems, focusing on preparing graduates with skills and knowledge to advance clean energy. Our MSE program provides students with the essential knowledge and technical skills required to formulate, analyze, and solve complex problems related to the optimal design and integration of sustainable energy sources into modern power networks in California and beyond.

## Research and Research Publications

SJSU researchers are working to incorporate renewable energy sources (wind farms, solar farms, biomass co-fire, rooftop solar), with carbon capture and storage by seawater — mafic rock mixture (sequestration). The researchers will explore both a benchtop model and a scaled-up system. They will quantify the solubility of carbon dioxide in seawater as a function of pressure and temperature and look into different mafic rock formations to find the best one for carbon capture. Additionally, SJSU researchers are synthesizing enzyme-inspired polymers for catalyzing the conversion of greenhouse gasses into useful fuels under eco-friendly conditions. In addition, we are engineering bacteria to recover rare earth metals from discarded electronics and landfills. Bacteria are also being investigated as a source of the biodegradable plastic, poly-hydroxybutyrate.

Our investigators are working to develop new materials to create safer and longer-lasting batteries. These include batteries using solid-state electrolytes and highly concentrated aqueous electrolytes.



### Effect of Cyclic Mechanical Stress on Ionic Conduction in Composite Polymer Electrolytes for Solid-State Batteries

by Dr. John Lee, Professor, Mechanical Engineering, College of Engineering

Although degradation of electrodes has been studied extensively, very little is known about mechanical and microstructural changes within the electrolyte. This lack of knowledge limits the full development of safe and high-performance energy storage systems for diverse U.S. industry sectors ranging from electric vehicles, portable electronics, and biomedical devices. A more complete understanding of how dispersed rigid particles affect the mechanical behavior of polymer composites may further contribute to advances in other applications such as fuel cells, photovoltaics, biomaterials, and flexible electronics.





## SDG 8 Decent Work and Economic Growth

*Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all*

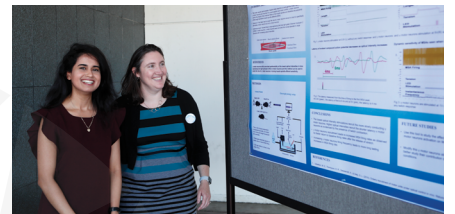
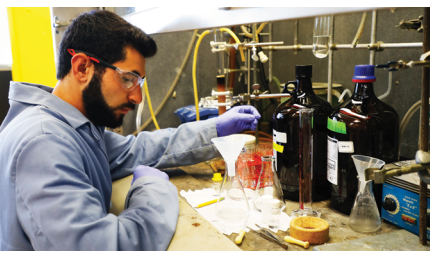
- 8.1 Sustain per capita economic growth in accordance with national circumstances**
- 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation**
- 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation**
- 8.4 Increase global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation**
- 8.5 Achieve full and productive employment and decent work with equal pay for all**
- 8.6 Substantially reduce the proportion of youth not in employment, education or training**
- 8.7 Eradicate forced labor, end modern slavery and human trafficking and child labor**
- 8.8 Protect labor rights and promote safe and secure working environments for all workers**
- 8.9 Devise and implement policies to promote sustainable tourism**
- 8.10 Expand access to banking, insurance and financial services for all**
- 8.a Increase aid for trade support for developing countries**
- 8.b Develop and operationalize a global strategy for youth employment**

“ The world has changed post-pandemic and our students, our graduates, are going to change the working world. What San Jose State needs to do, and will be doing, is getting ahead of that curve. We have already developed new degrees, particularly in high-demand, high-wage areas... to meet the needs of industry, to meet the needs of top employers. ”

- President Cynthia Teniente-Matson

As a higher education institution, our main goal is to provide our students with the skills and knowledge needed to excel in their future careers. SJSU goes above and beyond to provide our students with opportunities that will enhance their career development, in particular, the Lucas College and Graduate School of Business and the Office of Innovation. These programs also foster partnerships with local businesses, entrepreneurs and mentors.







## Lucas College and Graduate School of Business

The [Lucas College and Graduate School of Business](#) prepares business majors who understand how businesses function, who adaptively embrace change and technology, who work ethically with teams, and who comprehend the international imperative of business. Through our undergraduate schools and departments, we deliver thirteen business concentrations, and our graduate school provides advanced degrees and certificates in business, accounting, taxation and transportation management. Our centers and institutes offer unique opportunities for students to hone their knowledge and skills in tax, accounting, financial services, operations management, global leadership, entrepreneurship, and more.

The Lucas College and Graduate School of Business shined again in [Wall Street Journal \(WSJ\) ranking](#) released in spring 2023 with SJSU ranking #1 among public universities in the country for accounting salaries for graduates and #2 among public universities in the country for marketing salaries for graduates.

### **Hospitality, Tourism and Event Management**

The Hospitality, Tourism and Event Management degree incorporates multicultural-focused academic study in hotel and lodging, food and beverage, tourism, and event management.

### **The School of Information Systems & Technology**

The School of Information Systems & Technology prepares students to excel professionally and contribute meaningfully to the knowledge/information economy of the 21st century.

### **Silicon Valley Center for Entrepreneurship**

The Silicon Valley Center for Entrepreneurship promotes effective entrepreneurship through knowledge creation, knowledge dissemination, collaborative partnerships, and outreach activities.

## Research and Innovation - Office of Innovation

The Office of Innovation is focused on nurturing and growing a culture of innovation and entrepreneurship that will enhance the impact of SJSU research.

### **Silicon Valley Small Business Development Center**

Silicon Valley SBDC at San José State University provides small businesses with the solutions they seek and the confidence they need to realize their dreams.

### **Student IDEAS Club**

IDEAS is the premier student-led entrepreneurship club at San José State University. We connect students from all majors and help them begin their startups by providing them with the necessary resources and workshops that entrepreneurs need to succeed.

### **Silicon Valley Innovation Challenge**

Our mission is to cultivate entrepreneurs at San José State University and provide the necessary tools and guidance to enable students to take their innovative business ideas to the next level. All ideas remain the intellectual property of the participant. Winners of the competition receive cash awards to further advance their innovations, but all participants receive mentorship and networking opportunities from SJSU faculty, industry professionals, and proven entrepreneurs who are eager to support students throughout the entire design process.

### **Bay Area Retail Leadership Center**

In the greater San José metropolitan area, the retail industry operates in the shadow of the high tech industry. It is surprising how little some students know about career opportunities in retail. Retail management has become highly data-driven, technology-reliant, and talent-reliant. Professionalism in the industry has substantially escalated and high-leverage, high-paying career opportunities abound. BARC is designed to apprise students of these opportunities, to provide abundant experiences that complement classroom learning, and, finally, to enhance students' chances of securing challenging and rewarding internships and careers in retail.

### **Center for Banking and Financial Services**

SJSU students may not consider careers in banking and financial services as primary career options, however, The Center for Banking and Financial Services (CBFS) creates connections between financial institutions and students, facilitates internships and job recruiting, and provides professional certificates which prepare students for credit analyst positions.

## **Dr. Martin Luther King, Jr. Library**

### **BIPOC Become Librarians**

San José State University's Dr. Martin Luther King, Jr. Library (King Library), San José State University's School of Information (SJSU iSchool), and San José Public Library (SJPL) will collaborate to establish BIPOC Become Librarians (BBL), a pilot mentorship and internship program that will introduce undergraduate students who are Black, Indigenous, and People of Color (BIPOC) to careers in Library and Information Science (LIS).

## **Career Center**

The Career Center leads campus efforts to prepare students for the transition to life after college and the path to lifelong career success.

We accomplish this by:

- Delivering career-readiness education to students through individual, group, real-time, and on-demand interaction,
- Generating and connecting students to career opportunities via employer and alumni networks, and
- Guiding students throughout their journey to career success.

### ***Spartan Career Closet***

The SJSU Career Center runs the Spartan Career Closet to offer free professional clothing and accessories to students. All current SJSU students are eligible to choose and keep one full outfit\* each academic year.

## **Black Engineer Week**

Black Engineer Week, now in its second year, has a simple goal: to increase the number of successful Black engineering professionals in Silicon Valley.

The event, founded by Folarin Erogbogbo, associate professor of biomedical engineering at SJSU's Charles W. Davidson College of Engineering, kicked off June 16, 2023 with a welcoming event. Supported by SJSU's College of Engineering, the Division of Student Affairs and the Career Center, the event invites Black engineers, scientists and technical professionals at all levels to build and strengthen their community ties with students (K-12, undergraduate and graduate); university and college faculty and leaders; postdoctoral and career-transitioning researchers; small businesses and industry professionals; K-12 educators and practitioners; and researchers from national labs.





SpartUp will serve as a resource hub for Spartan innovators along all stages of the startup journey,” explains Ashley. “It’ll effectively reach underserved populations and first-gen entrepreneurs in ways that other incubators have not. It will be a game changer for many new entrepreneurs across the SJSU community.



## SpartUp Incubator

by Mash (Michael) Ashley, SpartUp Incubator Launch Director, Division of Research and Innovation

SpartUp Incubator serves as a collaborative ecosystem joining SJSU's Division of Research and Innovation, university programs, and community organizations — providing a web of support for the Spartaneur. The SpartUp program will also encompass technology transfer and a partnership with the Silicon Valley Small Business Development Center (SBDC), to ensure an expanded runway for SJSU entrepreneurial support.

SpartUp positions SJSU as a leader in full-spectrum, applied research and real-world solutions, filling out SJSU's holistic approach to advancing faculty and student research into the public sphere where patented advancements have the potential to impact the world. SJSU aims to take the lead among public universities as a leader in public impact, community-led research, and experiential learning.





## SDG 9 Industry, Innovation and Infrastructure

*Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*

- 9.1 Develop quality, reliable, sustainable and resilient infrastructure with a focus on affordable and equitable access for all**
- 9.2 Promote inclusive and sustainable industrialization (manufacturing)**
- 9.3 Increase the access of small-scale industrial and other enterprises to financial services**
- 9.4 Upgrade infrastructure and retrofit industries to make them sustainable**
- 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries**
- 9.a Facilitate sustainable and resilient infrastructure development in developing countries**
- 9.b Support domestic technology development, research and innovation in developing countries**
- 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet**

The university's new Campus Master Plan is re-envisioning the physical andscape to meet the future needs of our campus community and beyond.

SJSU's Transformation 2030 strategic plan includes the goal to "Rebuild and Renew" our campus — to be a "flourishing, modern campus with state-of-the-art infrastructure, campus spaces and technology to support learning, research and community." To do that, we are renewing our Campus Master Plan. SJSU also offers academic programs that prepare our students to be innovative leaders in manufacturing and technology.

### Facilities Development and Operations

#### The Campus Master Plan

The Campus Master Plan sets out a vision for SJSU based on Transformation 2030 and anticipates the future spatial needs of the university by developing strategies for future growth.

The Campus Master Plan addresses the physical spaces on campus including the campus layout, uses, and buildings, all the spaces in between buildings that make up the public realm, the ways we get to and around campus, and the infrastructure that helps the campus operate. The Campus Master Plan guides capital funding proposals. The Campus Master Plan will address five areas: Space Planning, Campus Mobility, Campus Life, Campus Resilience (including sustainability), and an Environmental Impact Report (EIR).





# SAN JOSÉ STATE UNIVERSITY TRANSFORMATION 2030





## Research and Innovation

### Industrial Design

SJSU researchers are studying ways to create smarter environments for better living. This includes the study of how healthcare spaces are laid out, the ways in which robots interact in human environments, and smarter grocery stores with autonomous checkouts.

### **Deep Humanities**

The [Deep Humanities and the Arts](#) Initiative and Lecture Series is a series of public lectures, roundtables, and public discussions that draw upon the humanities to frame our understanding of ethical and social impacts of modern digital technologies. This permanent theme is tied to an SJSU institute by the College of Humanities and the Arts in collaboration with the Charles W. Davidson College of Engineering and Lucas College and Graduate School of Business and reflects the surrounding technology industry in Silicon Valley, and is part of the foundational speaker series and research of our new [Digital Humanities Center](#).

## Charles W. Davidson College of Engineering

### Industrial and Systems Engineering

The BS Industrial and Systems Engineering program prepares engineers for a broad scope of systems analysis and design challenges that help improve the overall performance of an organization or system.

ISE's focus is on productivity improvement, concerning the human aspects of work as well as finding the right combination of resources to ensure that an organization performs at its best. Using the latest computer-based analytical and modeling technologies, ISE bridges the gap between management and operations, applying organizational development, continuous improvement, Total Quality Management, ergonomics and production systems expertise.

### Engineering Technology

The Bachelor of Science in Engineering Technology with a concentration in Manufacturing Systems is designed to prepare students for technical and management careers in business and industry. Manufacturing Systems prepares you for a career in manufacturing design and management. Students will gain knowledge, skills, and practical experiences in innovative manufacturing processes and management, computer integrated manufacturing, robotics and control systems, and computer-aided manufacturing.

## Department of Design

### Industrial Design

Established over fifty years ago, the Industrial Design Program at SJSU is an undergraduate bachelor of science (BS) degree offered within the Department of Design. The program is focused on human-centered innovation, technology application, and creative problem solving. Students begin with a foundation in visualization, form giving, creative thinking, manufacturing processes, material innovation, and aesthetics. From there, students progress to more advanced work focused on creative collaboration, solving problems in human-centered ways, exploring solutions to pressing global issues and specializing, or diversifying, in areas of design that support each student's professional aspirations.

Industrial design deals with the design of the objects, experiences, and services that are a part of everyday living for humans, businesses, and organizations. With the world in constant flux, we aspire to equip future industrial designers with the tools they need to become global citizens and effect change throughout the world.

## Open University

### **Ethics of Science and Emerging Technologies, Advanced Certificate**

The Advanced Certificate in Ethics of Science and Emerging Technologies (CESET) enables matriculated SJSU students and industry professionals to gain advanced knowledge of the goals and methods of scientific inquiry and ethical decision-making, and then apply this knowledge to pressing contemporary social issues. By engaging with ethical theory, philosophy of science, epistemology and applied philosophy and ethics, students will acquire practical skills which are increasingly valued on the global job market and can help them advance their career.



## RESEARCH INSIGHT

### **Collaborative Research: Broadening Inclusive Participation in Artificial Intelligence Undergraduate Education for Social Good Using A Situated Learning Approach**

**by Dr. Yu Chen, Associate Professor, School of Information Systems and Technology, Lucas College and Graduate School of Business**

This project aims to improve college-level education in artificial intelligence (AI). Advances in AI will likely improve transportation, education, healthcare, and other societal issues. It is important that college students gain skills in AI to prepare them to be future leaders and innovators. However, current AI education lacks both broad multidisciplinary participation and diversity. The project plans to develop and implement strategies for improving education in AI that are available to all students, not just those enrolled in computer science programs. To do so, the project team hopes to develop materials that identify social problems and teach students to apply AI concepts and methods to address these problems. As a result, this project may better prepare today's college students to enter the STEM workforce of the future.

The project intends to develop AI learning modules to stimulate AI learning in students. The students will be trained how to identify social problems. The interdisciplinary AI For Social Good (AI4SG) modules will be implemented in the programs of management information systems, geography, and computer science at three California State University campuses. The team plans to host an annual workshop to showcase student projects and disseminate best practices of AI4SG education.



## SDG 10 Reduced Inequalities

*Reduce inequality within and among countries*

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- 10.1 Progressively achieve and sustain income growth for the bottom 40 percent of the population**
- 10.2 Empower and promote the social, economic and political inclusion of all,**
- 10.3 Eliminate discriminatory laws, policies and practices and promote appropriate legislation, policies and action**
- 10.4 Adopt fiscal, wage and social protection policies, to help progressively achieve greater equality**
- 10.5 Improve the regulation and monitoring of global financial markets and institutions**
- 10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions**
- 10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people**

SJSU is ranked #13 for top colleges for diversity by the Wall Street Journal/Times Higher Education (WSJ/THE) among colleges and universities in the nation.

The heartbreak, outrage and protests following the killing of George Floyd and Breonna Taylor in 2020 served as a tipping point for our campus community. These horrific incidents, as well as other recent attacks against Black/African American individuals as well as the rise in anti-Asian violence in our nation, are a call to action for San José State University, and we have vowed to develop actionable plans and commit to eliminate systemic racism on our campus in both the short-term and long-term. SJSU aspires to be a fully-inclusive, anti-racist, multicultural organization.

### Hispanic Serving Institution (HSI) and Asian American and Native American Pacific Islander Serving Institution (AANAPISI)

We are proud to be a [Hispanic Serving Institution \(HSI\)](#) and [Asian American and Native American Pacific Islander \(AANAPISI\)](#) Serving Institution.

As part of the Adobe corporation's Anchor School Program, SJSU received a \$1M grant in Fall 2021. A portion of the funds were dedicated to launching an HSI Institute that serves as a central university resource to support the creation and implementation of culturally-sustaining programming, curricula and research. Jonathan Gomez, assistant professor of Chicana and Chicano Studies, serves as the Faculty in Residence for HSI Initiatives and coordinates these efforts with campus partners who have been involved in programming at the Chicana/Latinx Student Success Center (aka "Centro").





As a central element of his appointment, Gomez facilitates a semester-long faculty learning community (FLC) on Digital Counter-Storytelling for Student Leaders. In this FLC, participants learn to create counter-storytelling assignments that enhance students' leadership skills using Adobe products. "Counter-storytelling" is a technique that elevates marginalized voices to disrupt mainstream narratives about historically underserved communities. Assignments that invite counter-storytelling enable students to connect their lived experiences to course content and learn how to record and share those stories.

Faculty who have participated in this FLC are expanding our institutional capacity to create classroom environments where students feel that they belong and that their stories matter, leading to increased academic engagement and success, as well as an enhanced ability to bring their full selves into the workplace in any career path. In addition, the FLC has been found to greatly increase the faculty members' own sense of belonging at SJSU.

All of the institute's programming is founded on Somos SJSU, a campus-specific framework for HSI-related projects, grants, and initiatives. It seeks to cultivate an approach to serving Latinx students that is grounded in the successful model that has been developed and implemented by the faculty, staff, and student leaders at Centro. Based both on previous research and intervention models, Somos SJSU has been carefully developed and grounded in an understanding of the experiences, needs and strengths of SJSU's Chicana/Latinx community. A growing number of publications and presentations have resulted from the work done in this area by our core HSI team, and we will shortly launch a Somos SJSU website to share these efforts and celebrate our HSI status.

## Office of Diversity, Equity, and Inclusion

The [Office of Diversity, Equity, and Inclusion \(ODEI\)](#) is dedicated to the standards of inclusive excellence, which view San José State's mission of academic excellence as inseparable from our commitment to diversity, equity and inclusion. The ODEI works to create a campus community that is free from discrimination and systemic and cultural barriers to academic and professional success for all of its students, faculty, staff, and administrators. The ODEI envisions a campus where its members engage in robust intergroup dialogue and collaboration across groups, divisions and silos.

Recently the ODEI has led SJSU's actions on systemic racism. Read [here](#) to learn about their immediate, intermediate, and long-term plans to create permanent organizational change with regard to systemic racism on our campus.

### ***Employee Affinity Groups***

[Faculty and Staff Employee Affinity Groups](#) at San José State University provide opportunities to make identity-specific connections across campus. There are several groups on campus dedicated to fostering community among faculty and staff from underrepresented and marginalized communities. The groups are:

Asian Pacific Islander Faculty Staff Association (APIFSA) - APIFSA's mission is to provide a safe and supportive network for Asian Pacific Islander (API) students, staff, and faculty at San José State.

Black Faculty and Staff Association - Initially formed in 1974, the purpose of the association is to foster and promote the development of Black faculty and staff at San José State University.

Chicano/Latino Faculty & Staff Association (CLFSA) - The CLFSA supports, empowers, and advocates for Chicano/Latino students, faculty and staff at SJSU.

Gathering of Academic Indigenous and Native Americans (GAIN) - The Indigenous and Native American Faculty and Staff Affinity Group seeks to build community, promote visibility, and provide support for SJSU's Indigenous and Native American faculty and staff through campus activities and initiatives.

Jewish Faculty and Staff Association (JFSA) - The purposes of the JFSA are to represent the interest of the campus Jewish faculty and staff in university affairs and to foster relations between the Jewish community and the university.

PRIDE Faculty and Staff Association (PRIDE FSA) - is open to all faculty and staff members interested in the spectrum of gender identity and sexuality at San José State University

## **IDEAS: Instructional Development for Equity, Accessibility and Success**

SJSU's Center for Faculty Development offers teaching consultations and observations to all faculty, including postdocs and graduate teaching associates. Our IDEAS program provides faculty with an opportunity to receive support on their course design, pedagogy, syllabus, created lessons/modules, and other elements of their instructional assignment. All consultations and observations are confidential and may occur throughout the academic year. This formative feedback opportunity is designed to support and encourage faculty in reflective practices intended to inform their overall presence and effectiveness as educators.

## **Division of Student Affairs**

### **Accessible Education Center**

The Accessible Education Center, through collaboration with the campus and community, is committed to redefining ability for students with disabilities by providing comprehensive services in support of the educational development and success of students with disabilities in a student-centered and professional environment.

The Accessible Education Center will be the leader in creating a welcoming and accessible campus for people with disabilities. Through collaboration and delivery of exemplary services, the Accessible Education Center will be the campus authority on disability issues and resources. The Accessible Education Center and its colleagues will promote independence and academic excellence by embracing and applying universal design concepts. The Accessible Education Center will be known for promoting disability as an essential element embedded in the fabric of diversity through 'Ability Redefined.'

### **UndocuSpartan Student Resource Center**

We are committed to creating an informed and affirming learning environment for undocumented students where they can be empowered and engage in transformational opportunities that support their personal, academic, and career growth.

We envision an equitable and inclusive education system where all students, regardless of their immigration status, can achieve their personal, educational, and career aspirations.

### **Black Leadership and Opportunity Center**

The SJSU Black Leadership and Opportunity Center (BLOC) serves to holistically empower, uplift, and develop all students in the African Diaspora through strengthening and building community bonds, encouraging a positive Black identity, and providing social and academic support.

Our center serves as a home for all of our Black students and welcomes a diverse array of voices, opinions, cultures, and experiences. We provide services which aim to promote academic and personal success starting with recruitment through graduation.



### **MOSAIC Cross Cultural Center**

The mission of MOSAIC Cross Cultural Center is to provide a safe and welcoming environment that honors and celebrates diversity. We offer support, advocacy for historically underrepresented groups, leadership opportunities, and intentional programming that focuses on critical thinking, social justice, and cultural empowerment for the SJSU community.

### **Chicanx/Latinx Student Success Center**

The Chicanx/Latinx Student Success Center (CLSSC, also known as Centro) will understand and respond to Latinx students' unique needs through campus community advocacy and student empowerment.

Centro will be a culturally-sustaining, academically-affirming space where students, staff, and faculty can collaborate to find new and effective ways of increasing Latinx student persistence, retention, and graduation rates.

### **Center for Asian Pacific Islander Student Empowerment**

The mission and goals will be related to supporting the academic and personal goals of our diverse APIDA community while fostering a sense of belonging. Programming and services will focus on student success and promoting the retention and persistence of our students from recruitment to graduation.

### **César E. Chávez Community Action Center**

The César E. Chávez Community Action Center (CCCAC) connects SJSU students with civic engagement opportunities that deepen educational experience while promoting a lifelong commitment to activism and social justice, which are at the heart of the César Chávez legacy.

### **Educational Opportunity Program**

The Educational Opportunity Program (EOP) is designed to improve student academic support of first-generation, low-income and educationally disadvantaged students. The program provides admission, academic, and financial assistance to EOP-eligible undergraduate students considered California residents or AB540 students.

## **College of Social Science**

The College of Social Sciences prepares students for impactful careers in fields such as business, government, communication, and law, while empowering them as democratic participants in a rapidly changing world. Emphasizing the contributions of the many cultures that call Silicon Valley home, the college is dedicated to fostering a more inclusive society and creating more knowledgeable and conscientious citizens.

### **African American Studies**

Our goal is to empower students in African American Studies to expand their knowledge base connected to the intellectual traditions within the African Diaspora. Our curriculum, programming, and scholarship examines, explores, and engages the intellectual traditions within the African Diaspora from multiple perspectives.

### **Chicana and Chicano Studies**

The Chicana and Chicano Studies Department at SJSU was created in 1968 and is the oldest Graduate Program in Chicana/o Studies in the country. Our programs prepare students to critically examine and address intellectual traditions and contemporary issues resulting from race, ethnicity, class, and gender intersections in Chicana/o-Latina/o and other communities.

## **Sociology and Interdisciplinary Social Sciences**

Sociologists analyze how social institutions and social structures affect individuals in society. We aim to provide students with the skills and knowledge necessary to navigate the social, political, economic, historical and cultural issues that build and sustain effective leadership in our complex global society.

## **Institute for the Study of Sport, Society and Social Change**

The legacy of equity and social justice is a part of SJSU's DNA. The Olympic Project for Human Rights (OPHR) was founded in 1967 by SJSU alumni Harry Edwards and Ken Noel to "1) To stage an international protest of the persistent and systematic violation of black people's human rights in the United States; 2) To expose America's historical exploitation of black athletes as political propaganda tools in both the national and international arenas; 3) To establish a standard of political responsibility among black athletes vis-a-vis the needs and interests of the black community, and to devise effective and acceptable ways by which athletes could accommodate the demands of such responsibilities; and 4) To make the black community aware of the substantial 'hidden' dynamics and consequences of their sports involvement." The OPHR advocated for a boycott of the 1968 Olympics, where SJSU students Tommie Smith, John Carlos, and Lee Evans were anticipated to place gold in track. Smith, Carlos and Evans considered their Olympic platform through a different lens. They realized they still had an opportunity to address their concerns about discrimination and human rights before millions of spectators. On October 15, 1968, the gun sounded to begin the 200-meter dash featuring Smith and Carlos. Smith sprinted away with the gold medal in a world record time of 19:83. Australian Peter Norman won the silver. Carlos captured the bronze.

As the medal ceremony was about to begin, Smith and Carlos appeared on the podium shoeless and in black socks to symbolize the poverty many Black people experience in the United States. On their USA track uniforms they displayed OPHR buttons. Silver medalist Norman, who was keenly aware of what was about to take place, also wore an OPHR button to stand in solidarity with Smith and Carlos.

As the "Star-Spangled Banner" began to play, Smith and Carlos bowed their heads and raised their black-gloved fists toward the sky. The resulting photo created one of the most visceral and transcendent moments in the history of the confluence of sports and the fight for equality. The nation watched the Black Power Salute as the 1968 Olympics marked the first time an American network broadcast the Games.

Smith later said the raised fists were never about a hatred for America but "a cry for freedom and for human rights. We had to be seen because we couldn't be heard."

The university was founded on education for all, and provides a voice for those who might otherwise remain silent. The ISSSSC honors this legacy and continues the dialogue about athletic activism and the influence of sport in effecting positive social change. As our nation confronts and explores deeply complex social issues, it is critical that we continue to challenge the boundaries of sport and activism. Sport offers the occasion to pose big questions, not just of athletes but also of ourselves, and the chance to provide enlightened perspectives. Hence, ISSSSC amplifies and embodies the motto "Words to Action."

## **Human Rights Institute**

The San José State University [Human Rights Institute](#) specializes in human rights research, journalism, programming, and policy design. HRI students and faculty study pressing social problems and work with community organizations, stakeholders, and policy makers to inform and design solutions according to relevant scholarship, human rights law, and international best practices.



## ***Silicon Valley Pain Index***

The [Silicon Valley Pain Index](#) is produced by the Human Rights Institute. The annual study focuses on racial discrimination and income inequality in the region. The report, first published in 2020 in response to the murder of George Floyd by Minneapolis police, was inspired by an index compiled about New Orleans in the wake of Hurricane Katrina.

The purposes of the Silicon Valley Pain Index (SVPI) report are to: 1) Provide an efficient, easily digestible, statistical overview of structured inequalities to inform policy and practice in “Silicon Valley”; 2) Serve as a measure of Santa Clara County’s performance as a “human rights county”, which it declared in 2018 in accordance with the International Bill of Human Rights; and 3) Inspire collaborations between scholars, students, stakeholders, communities, and policy makers to address inequality and achieve greater human rights practice.

The Pain Index inspired a pilot program to serve unhoused students in Santa Clara County that was led by Santa Clara County Supervisor Susan Ellenberg and California State Senator Dave Cortese. Announced in September 2022, this program will support unhoused high school seniors make their transition to two- or four-year colleges, trade schools, apprenticeship programs, or work opportunities through “no-strings-attached” monthly payments of about \$1,000. Senator Cortese says, “The Pain Index made clear that systemic change is needed to truly close our generational wealth gap that continues the cycle of poverty, and it was this very report that led to an historic proposal to support Santa Clara County’s unhoused students. We need new tools to address our growing social divides that have only worsened during the pandemic, and I am grateful to the authors of the Pain Index, Dr. Scott Myers-Lipton and Dr. William Armaline, for illuminating these issues for so many and for influencing and informing public policies to effect change.”

The 2023 report found the gap between the richest residents in Silicon Valley and the poorest is widening, as well as the gender wage gap. Myers-Lipton, a SJSU sociology professor and lead author of the Pain Index, said the [goal of this year’s Pain Index](#) is to highlight what is happening in the community so policy makers can implement changes that make a real difference.

## ***SJSU Lurie College of Education***

### ***The Queer Educators and Counselors Network (QECN)***

QECN at the SJSU Lurie College of Education creates a safe and affirming space for educators, counselors, and students to appreciate diversity in sexual and gender identities. We also provide support, training, and resources to help students, faculty, and staff examine their own practices and engage with their own understandings of gender and sexuality. Through individual and group support, professional development opportunities, research activities, and advocacy, we hope to empower our community and world.

### ***Enhancing Ethnic Studies Education and Teacher Diversity Pipelines***

The Enhancing Ethnic Studies Education and Teacher Diversity Pipelines project was created to address preparing teachers for new Ethnic Studies requirements in the California State University system and K-12 public schools. The project also aims to recruit and retain more teachers of color, an outcome that research has shown will demonstrably benefit all students and will have a direct positive impact on the educational outcomes of students of color.

## KEY HIGHLIGHTS

# 2022 SILICON VALLEY PAIN INDEX

*Extreme Racial & Social Inequalities Persist, and In Some Cases Worsen*

<b>0</b>	Number of Apple executives and senior managers that are African American, Pacific Islander, and Indigenous American men (77 White men, 126 total).
<b>.7</b>	Number of Silicon Valley households (6,913) that own 25% of the collective regional wealth versus bottom 50% of households (467,187) owning 1.4% of wealth.
<b>46</b>	Percent of children in Silicon Valley who live in households that do not earn enough income to cover the family's basic needs.
<b>72</b>	Percent of San Jose residents who support a non-police approach to issues such as traffic safety, mental health, school safety, and assisting the homeless.
<b>73</b>	Percentage of tech companies that have 0 African Americans on their executive leadership team.
<b>204</b>	Number of affordable housing units completed in San Jose between July 1, 2021 and June 15, 2022, down from 417 housing units built in previous year.
<b>250</b>	Number of homeless people who died on the streets of Santa Clara County in 2021, a 55% jump from 2019.
<b>1,526</b>	Number of injuries of Latinx people caused by San Jose Police Department from 2017 to 2021, in comparison to 565 cases against Whites.
<b>3,165</b>	Median monthly rent in dollars in the San Jose metro area in December, 2021, up 20% from previous year, making it the most expensive area to rent in the U.S.
<b>14,337</b>	Amount spent per pupil in dollars in the Franklin McKinley School District with 59% Latinx students (\$75,898 average household income) versus \$19,764 in the Saratoga Union School District (\$195,584 average household income) with 4% Latinx students.
<b>336 Billion</b>	Amount in dollars of Apple's revenue in 2021, up \$275 billion from the previous year.



### **Intersectional Disability Studies**

The Intersectional Disability Studies project brings together disability justice and racial justice research frameworks to support children, families and communities with intersecting identities. The initiative collaborates with disabled activists, family advocates, and SJSU students and faculty to build community and understanding.

## **Research and Innovation**

SJSU researchers are helping to identify the failure of systems that create disparities based on race in health, education, and the economy. This work serves as a platform to compel sweeping policy change to deconstruct racist structures. Furthermore, SJSU is partnering with community members to provide platforms for their voices and stories, creating opportunities for public engagement with the ways in which historic injustices continue to suppress diversity and inclusion.

## **Faculty Hiring**

### **Faculty Retention, Tenure, and Promotion (RTP)**

As of Fall 2022, SJSU's headcount includes 789 tenure-line faculty and 1333 lecturers. The Office for Faculty Success works in close partnership with University Personnel - Faculty Services to guide faculty through multiple processes (such as Range Elevation and RTP) at different career stages.

As with the recruitment process, all faculty elected to serve on RTP committees are required to enroll in an online, asynchronous training program that addresses the ethics and responsibilities of being an evaluator, recognizing and preventing implicit bias, and consideration by areas of achievement. Issues of diversity, equity, and inclusion are woven throughout the training.

Overall, SJSU has a high rate of tenure and promotion, with a success rate of 96%, as well as an equally high rate of range elevation success for lecturer faculty.

The Office for Faculty Success has dedicated programs each semester to create communities of support for BIPOC faculty and faculty women of color. Since 2021, Faculty Success has also been an institutional sponsor for the Faculty Women of Color in the Academy national conference, hosted annually at Virginia Tech.

In recent years, Faculty Success has worked with the Office of Research to encourage and support faculty to pursue competitive research fellowships and awards. We also have worked to retain our esteemed faculty through matching outside offers.

## **College of Humanities and the Arts**

In 2022, the College of Humanities and the Arts instituted student curricular engagement with current issues as an annual initiative of "[H&A in Action](#)." 2022's theme, continuing in 2023, is "The Inclusion Initiative: Social Justice and Racial Equity." This follows up on the college theme of Borderlands, which explored issues of immigration along with issues of belonging and equity, between 2018-2021.

During recent years, our country has been experiencing a racial reckoning starting with the murder of George Floyd. Issues of racial equality and social justice and exposure of inequality and injustice have been in our minds and will continue to do so. As a university, we owe it to our students to teach them ways of thinking through these issues and informing their lives. But we in the humanities and the arts have the rational and creative powers and the disciplinary tools to not simply admire each other's works but to include in our circles those who may be perceived as "the other" and to value the multiplicity of colors, genders, shapes, beliefs, opinions and habits, as they all define our humanity.

Our college's Inclusion Initiative: Social Justice and Racial Equity is an exercise in releasing the artistic, creative and intellectual geniuses in our students to express their ideas and analyses of what inclusion means, to visualize life in an inclusive social environment, to create representations of such a life, and to discover the multiple implications of social justice and racial equity. This work has been included in a "Curriculum Community" in which faculty design assignments that address these issues and programming at 15 events over the last two years. The faculty have also participated in a reading group which addressed these same issues.



## RESEARCH INSIGHT

### **A first-of-its-kind national Asian American, Native Hawaiian, and Pacific Islander (AANHPI) Behavioral Health Center of Excellence**

**By Dr. Kathy Wong Lau, Former Chief Diversity Officer, Office of Diversity, Equity, and Inclusion.**

The Hawai'i Department of Health (DOH) was awarded nearly \$3.5 million from the U.S. Department of Health and Human Services to establish a first-of-its-kind national Asian American, Native Hawaiian, and Pacific Islander (AANHPI) Behavioral Health Center of Excellence.

DOH will receive the nearly \$3.5 million in federal funds over the next five years. The Center of Excellence will promote culturally and linguistically appropriate behavioral health information and practices; establish a steering committee with participants from across the country to identify emerging issues; and provide training, technical assistance, and consultation to practitioners, educators and community organizations. Key partners include Papa Ola Lokahi and San José State University.



## SDG 11 Sustainable Cities and Communities

*Make cities and human settlements inclusive, safe, resilient and sustainable*

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- 11.1** Ensure access for all to adequate, safe and affordable housing and basic services
- 11.2** Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety
- 11.3** Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management
- 11.4** Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- 11.5** Significantly reduce the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters
- 11.6** Reduce the adverse per capita environmental impact of cities/air quality and waste management
- 11.7** Provide universal access to safe, inclusive and accessible, green and public spaces
- 11.a** Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning
- 11.b** Adopt and implement integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, and resilience to disasters
- 11.c** Build sustainable and resilient buildings utilizing local materials

San José and San Jose State University was selected as a model city and university partner for the new USA Sustainable Cities Initiative (USA-SCI) in 2015.

This project, led by the United Nations Sustainable Development Solutions Network (SDSN), brings together academic institutions and key stakeholders to support the UN's newly adopted Sustainable Development Goals – a series of global aspirations and priorities designed to take on major sustainable development challenges. San José State University served as the university partner to facilitate a process that evaluated the City of San José's strategies and goals in support of sustainable development. In addition, recommendations for future opportunities the City could consider to implement the SDGs at the local level were developed. The final report from this work, [San José: Implementing the UN's Sustainable Development Goals at the Local Level](#), was published in December 2016.









## Center for Community Learning & Leadership

The [Center for Community Learning & Leadership \(CCLL\)](#) supports curricular service learning and community engagement experiences at SJSU. CCLL provides resources and support to faculty, students, and community organizations who engage in intentional educational opportunities that contribute to the public good. Service-learning (SL) is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich learning experiences, teach civic responsibility, and strengthen communities. SL pedagogy can be implemented in any discipline. Participation in SL classes has been demonstrated to increase undergraduates' civic involvement, leadership skills, academic achievement, and career development. Service-learning and community engagement are instructional strategies that promote student learning through active participation in meaningful service in the community directly related to course objectives and community-identified needs.

Since the Center's founding, over 80,000 SJSU students have contributed more than 1,400,000 hours within the community through curricular service. At SJSU, service-learning takes place in all of the nine colleges. In the Department of Child and Adolescent Development, specifically, service-learning is embedded throughout the undergraduate experience, enabling students to become strong advocates for their communities and transition into several career pathways such as early childhood education, K-12 education, and non-profit advocacy, research, and policy.

Each year, the CCLL provides Service-Learning Curriculum Development Grants to support faculty with the design and implementation of a new service-learning component in a course in alignment with the California State University Chancellor's Office Community Engaged Learning Taxonomy. The CELT identifies six essential elements of SL: reciprocal partnerships, benefits to the common good, academic relevance, civic learning, critical reflection, and integrated assessment. In Fall 2022, three new service-learning courses were taught that address sustainability, climate change and resource efficiency. In 2022-23, 84 SJSU students will complete more than 35,000 hours of service through the College Corps.

### **Programs that the CCLL manage include:**

[SJSU College Corps](#) - The College Corps is a historic state level investment in service that creates debt-free pathways for students who commit to serve for an academic year. SJSU undergraduate students who complete 450 hours of service through the College Corps will receive up to \$10,000 to help pay for college.

[Civic Action Fellowship](#) - The CA Fellowship is a state and national service partnership through which SJSU students provide computer programming enrichment for underserved third–sixth grade youth attending outside of school programs.

[LEAD California Community Engagement Student Fellowship](#) - The Fellowship program is a 4-month initiative specifically designed to support student leaders advancing service, service learning, and community engagement at LEAD California member campuses throughout the state.

[Project SHINE](#) - Project SHINE links community learning students with older immigrants and refugees seeking to learn English and navigate the complex path to U.S. citizenship.

[Students Demand Action](#) - Students Demand Action works with expert organizers, researchers, legal experts, and policy wonks to organize the local community in demanding policy change that will end gun violence in America.

[VET Project](#) - VET Connect Peer Leaders receive stipends to serve the student veteran community and to educate others about the needs, strengths, and experiences of veteran and military students.

## **Silicon Valley Social Innovation Leadership Network**

The [Silicon Valley Social Innovation Leadership Network \(SVSILN\)](#) is committed to building an engaged network of community leaders. Together, this network creates innovations to address critical social needs. Over the years we have partnered with various organizations in the Silicon Valley area to address issues such as homelessness and how to make educational technology more accessible and engaging.

## **Administration and Finance**

### **[Leadership in Energy and Environmental Design \(LEED\) Buildings](#)**

All new buildings at San José State University (SJSU) are designed and built in accordance with LEED (Leadership in Energy and Environmental Design) — the world standard for green buildings — is a certified rating system offered through the US Green Building Council (USGBC). Buildings have the potential to earn platinum, gold, silver or certified status in one of four categories of standards. LEED buildings create sustainability by incorporating our local geography in building design, minimizing operating costs, maximizing energy and water efficiency, and choosing materials and systems whose total life cycle, from manufacture to replacement, minimize environmental impacts.

Several of SJSU's buildings have achieved LEED Gold certification, marking our superior achievements in numerous sustainable and environmental stewardship measures. Our most recently completed building, the Student Recreation and Athletic Center, achieved LEED Gold in 2020. It joins the Moss Landing Marine Lab, Dr. Martin Luther King, Jr. Library, and the Student Union as LEED certified buildings. All new building construction and major renovations going forward will be built to LEED Gold standards or better.





### ***Interdisciplinary Science Building***

On April 25, 2019, San José State broke ground on a state-of-the-art science facility focused on faculty-led student research. The first new academic building in 30 years, the Interdisciplinary Science Building is part of SJSU's commitment to a dynamic research and innovation environment in the heart of Silicon Valley. The Interdisciplinary Science Building has eight floors of modern science laboratories and research facilities, as well as collaborative, flexible learning environments. The building is home to chemistry and biology teaching and research spaces, an interdisciplinary Center for High Performance Computing, data and information science labs, and science administration. Each floor seamlessly integrates teaching and research. Students who move through these programs will graduate with the theoretical background, hands-on skills, and collaboration experience necessary to succeed in industry and advanced studies. The building is constructed to LEED Gold standards and opened in summer 2023.

### ***Affordable Housing***

The [Alquist Redevelopment](#) is a planned mixed-income, high-density workforce housing tower across from the Hammer Theatre along Downtown San José's Paseo de San Antonio. With upwards of 1,000 units of housing, and half reserved for graduate students, faculty, and staff, this project can become the first major investment in SJSU's comprehensive plan to make housing more accessible to the campus community.

Spartan Shops Real Estate offers 13 off-campus housing units at affordable rates for SJSU faculty and staff. Located within 1 mile from the campus, these units provide incoming faculty and staff an opportunity to integrate with SJSU life.

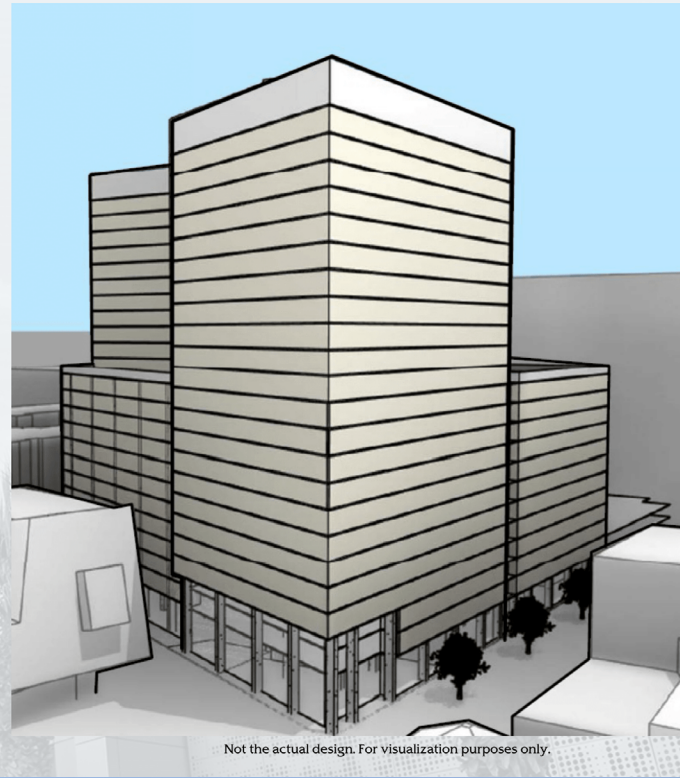
### ***Landscaping Program***

Grounds and Landscape Services maintains over 154 acres of landscaped grounds and sports fields at three locations. The unit works diligently to maintain a clean, safe, and attractive landscape by providing daily trash and litter pickup, tree and shrub trimming, lawn maintenance, weed abatement, and planting of annual colors to enhance the aesthetics of the campus landscape. The campus grounds are designed to maintain its setting as an urban forest that is used by students, faculty, staff and the surrounding community as a safe and accessible green space in Downtown San Jose.



# ALQUIST REDEVELOPMENT

Graduate Student, Faculty and Staff Workforce Housing







## MLK Library

### [Sourisseau Academy for State and Local History](#)

The mission of the Sourisseau Academy is to promote local history by sponsoring research, educational programs, and publications. We are actively engaged in the rescue of endangered archival documents and often act as a clearing house for the placement of archival collections in appropriate repositories. The academy maintains an extensive photograph and ephemera collection relating primarily to the history of Santa Clara County and Silicon Valley and the central coast region of California. The academy staff of archivists and historians provide research assistance and access to our archives.

### [Ira F. Brilliant Center for Beethoven Studies](#)

The Ira F. Brilliant Center for Beethoven Studies at San José State University is an extensive library and museum devoted solely to the life, works, and accomplishments of Ludwig van Beethoven (1770-1827).

## AS Transportation Solutions

[Transportation Solutions \(TS\)](#) helps alleviate automobile traffic to SJSU and reduces the impact on the University's parking facilities by creating a culture of sustainable transportation use. TS supports the commuting needs of students and the greater campus by working with various organizations and governing bodies at the local and regional levels to advocate for transportation solutions that are sustainable, equitable, accessible, and affordable. These efforts include launching new programs and enhancing existing programs while conducting marketing and outreach that increase the adoption of alternatives to driving alone. The work of TS helps the campus become a leader in its sustainability efforts by providing innovative mobility solutions. Some of these programs include:

**The Smartpass Program:** University transit pass that provides students and employees unlimited rides on Valley Transportation Authority, Santa Clara County's local transit.

**BayPass Pilot Program:** Launched in Fall 2022 and available to 7,000 students based on random assignment. Designed to measure the impact on travel of a Bay Area all-system pass compared to the SmartPass for local transit. This program is the first step to creating a Seamless Bay Area Transit System that is customer focused and addresses transit inequities.

**Bike Enclosures:** Students and employees can access enclosed bike parking on campus, providing increased security beyond the open racks and supporting biking to campus.

**Bike Reimbursement Program:** Students can obtain up to \$50 back on eligible bike expenses and a free U-Lock.

BikeShare: Annual discounts for bike share are available to students and employees. Students who qualify for CalFresh, SFMTA Lifeline Pass, or PG&E CARE utility discount are eligible for a bike share for all membership, including a \$5 annual membership for the first year, then \$5/month (\$60 a year).

BikeShare for Housing Pilot Program: Launched in Fall 2022, housing students receive six free 30-minute rides per month on regular bikes.

Regional Transit Discounts: Through partnerships, students and employees can obtain 50% off their 20-ride and monthly Altamont Express Corridor (Stockton - San Jose) passes. Students can receive up to 20% off their Highway 17 Express (Santa Cruz - San Jose) 15-ride and 31-day passes, while employees receive a smaller discount.

Zipcar: Individuals who need access to a car can obtain a discounted annual membership that allows them to rent vehicles from on campus or within walking distance for as low as \$8.50/hr. Students who sign up or renew their memberships can receive \$15 in free driving credit.

Trip Planning: Personalized trip plans are available to students and employees looking for the best route to campus to make their transit trips easier.

## Lucas College and Graduate School of Business

### **Mineta Transportation Institute (MTI)**

The Mineta Transportation Institute (MTI) conducts surface transportation research, education, workforce development, and technology transfer and leads the nation in researching safe, reliable solutions that increase the mobility of people and goods and strengthen the nation's economy. To achieve this, the MTI leverages new technologies and innovative processes to achieve a seamless, multimodal surface transportation system that integrates with other "smart city" investments; creates a safer, more reliable, and more resilient surface transportation system that improves equity through increased access to jobs, housing, services, and other opportunities; reduces the impact of transportation on climate change by identifying feasible alternative modes and fuels and innovative ways to reduce vehicle miles traveled; increases access to surface transportation so that people of all abilities and socioeconomic levels enjoy the same opportunities for learning, living, labor, and leisure; and optimizes passenger and freight movements to improve mobility of people and goods through development of more accurate data models and advanced application of analytical tools.

### **Master of Science in Transportation Management**

The Master of Science in Transportation Management (MSTM) is a fully accredited 30-unit Master's program. Students may choose among three graduate certificate options: High-Speed and Intercity Rail Management; Transportation Safety, Security, and Emergency Management; and Transportation Management.

### **Disaster Response Game**

LCoB faculty have customized and integrated into the curriculum a gamified simulation focusing on optimal resources allocation following a natural disaster. The Disaster Response Game represents a digital platform for teaching humanitarian logistics. The instructor selects the type of natural disaster, i.e. earthquake, pandemic, flood, fire, and asks teams of students to optimally allocate and distribute food, health care assistance, and supplies to the affected populations.

## Sustainable Mobility System for Silicon Valley (SMSSV)

The [SPARTAN Superway](#) is a long-term research initiative at San José State University to establish solar-powered automated rapid transit ascendant network ("SPARTAN") systems for urban environments. SMSSV is an interdisciplinary project from San José State University to design a PRT (Personal Rapid Transport) system using renewable resources.



## College of Social Sciences

### Urban and Regional Planning

The Department of Urban and Regional Planning at SJSU offers undergraduate and graduate degrees in Geography and an accredited Master of Urban Planning degree — the only programs of their kind in Silicon Valley. We also offer three undergraduate minors and seven advanced graduate certificate programs. Planning and geography are multidisciplinary fields, and our world-class faculty come from diverse disciplinary backgrounds including architecture, communication, economics, history, public policy, and sociology. Our programs emphasize experiential learning and career-oriented academic preparation, enhanced by our downtown location in the largest city in northern California. The department has cultivated long-standing relationships with industry partners, government agencies, and community-based organizations. Our graduates go on to rewarding careers in Silicon Valley companies as well as government agencies and non-profit organizations throughout the Bay Area and beyond.

### Institute for Metropolitan Studies

The mission of the Institute for Metropolitan Studies is to advance public understanding of California's planning, urbanization and development — How California Gets Made. Rooted in the CSU systems' historic commitment to teaching and public service, we believe a citizenry more knowledgeable about how California is made will be better able to address our region and our state's pressing social and environmental challenges. We focus on building sustainable civic infrastructure that helps improve decision-making, operation, efficacy and equity in California's planning and development systems, and on developing bold ideas, initiatives and novel collaborations across silos, sectors and metropolitan areas.

### CommUniverCity

CommUniverCity SJSU is a partnership between Community ("Comm"), SJSU ("Univer"), and the City of San José ("City") to improve community connections, health, and education in low-income neighborhoods in central San José, and in particular within the approximate 1.5 mile radius around the SJSU campus. CommUniverCity SJSU works with faculty, students, and community partners to create and sustain meaningful course-based service-learning opportunities, while at the same time encouraging civic engagement of students and increasing community connections among residents.

CommUniverCity runs multiple programs that develop technical and vocational skills for employment, decent jobs and entrepreneurship. Engineering in Action uses hands-on activities to teach basic engineering principles to K-12 students. In the Geology Rocks! Program, college students deliver lessons and activities about earthquakes, fossils and floods to elementary school students. Through after school workshops for K-12 students, business students teach financial literacy such as budgeting, money planning, and responsible use of credit. The Writing Partners program pairs college students with fourth- and fifth-grade students to exchange a series of handwritten letters with each other to improve their reading, writing, and social skills.

CommUniverCity projects seek to benefit residents by expanding understanding of and improving capacity for enhancing community health and the environment. Projects include workshops to help community members create backyard and neighborhood gardens that provide healthy fruits and vegetables and programs to develop neighborhood leaders who can advocate to solve challenges and present opportunities in the community. Flood Preparedness workshops serve residents in downtown San José, where many reside in flood plains from Guadalupe Creek or Coyote Creek. To help residents build capacity to prepare for the hazards of flood, workshop lesson content includes how families can make their own flood preparedness kits comprising essential survival items during a flood emergency.

CommUniverCity's Community Planning projects support inclusive and participatory planning and management. Urban planning students work with neighborhoods on important urban planning issues to help community members understand smart growth principles. A Community Planning team organizes and implements a year-long engagement project with underserved neighborhoods in San José. Using community planning principles, the team works with local residents, key stakeholder groups, and other partners to identify neighborhood assets, challenges, and opportunities. This information leads to creation of a professional quality planning report at the end of every academic year that the community can use to advocate for its top priorities.

A recent project on the planning for the new Alum Rock BART station is conducting a community assessment and visioning process with residents, businesses, community-based organizations, K-12 schools, and other important stakeholder groups for the Alum Rock Urban Village area. All of these programs aim to promote a college going culture among underserved youth.

## Hammer Theatre Center

SJSU runs the [Hammer Theatre](#), a professional performance venue with a main stage and a black box, the Concert Hall in the music building, and two smaller university theater spaces, including a proscenium stage and a black box, and a University Film Theatre. All of these facilities normally present a wide range of events, most with some cost, some with no cost. Approximately 550 events occur at these facilities annually, from theater to concerts.

## University Police

[The Emergency Preparedness Unit](#) supports the SJSU campus community by implementing programs and projects in emergency planning, training, response, mitigation and recovery.

Our mission is to prepare the campus to manage and recover from any type of emergency or disaster. The Emergency Operations Plan is maintained and tested to ensure competency and readiness amongst campus staff.



## RESEARCH INSIGHT

### Aging Queer in a Pandemic: Intersectionalities and Perceptions

By Dr. A.J. Faas, Professor, Department of Anthropology,  
College of Social Sciences

The purpose of this study is to highlight the experiences and issues of an overlooked demographic: older LGBTQ + adults in the US, in the context of the COVID-19 pandemic. This allows the authors to explore possible changes in policy and practice regarding the management of the pandemic with attention to elderly LGBTQ.

The authors have found that LGBTQ + people, especially older and transgender individuals, have unique experiences with hazards and public safety and healthcare professionals and organizations (e.g. heteronormative care, traumatic insensitivity, deprioritizing essential treatments as elective). Second, older LGBTQ + adults' perceptions of state responses to pandemics were heavily influenced by experiences with the HIV/AIDS pandemic. And third, experiences with the COVID-19 pandemic have important implications for preventing, responding to, and recovering from future epidemics/pandemics.



## SDG 12 Responsible Consumption and Production

*Ensure sustainable consumption and production patterns*

- 12.1** Implement the 10-year framework of programs on sustainable consumption and production
- 12.2** Achieve the sustainable management and efficient use of natural resources
- 12.3** Halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chain
- 12.4** Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle
- 12.5** Substantially reduce waste generation through prevention, reduction, recycling and reuse
- 12.6** Encourage companies to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- 12.7** Promote public procurement practices that are sustainable
- 12.8** Ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
- 12.a** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
- 12.b** Develop and implement tools to monitor sustainable development impacts for sustainable tourism

In 2020, Spartan Eats was proud to become the second California State University to complete all of the requirements from Fair Trade Campaigns to become officially fair-trade certified. We sell products that are certified to seek equity in trade and create opportunities for economically and socially marginalized producers

SJSU has been making strides in both waste reduction, responsible consumption and academic programs that encourage sustainable life cycle production.

### Center for the Development of Recycling

The [Center for the Development of Recycling](#) (CDR) is a university-based non-profit environmental research and service organization. Established in 1989, CDR is committed to maintaining and distributing reuse and recycling information through its call center, RecycleStuff.org website, chat line, and social media sites while developing its staff of service-learning students into environmental professionals.









## Spartan Eats

### ***Waste Not Campaign***

Food waste is a quickly growing problem, which is why Spartan Eats is excited to implement our Waste Not Campaign. Waste Not is a food waste reduction program used by Spartan Eats to track, measure, and reduce the amount of kitchen food waste in our facilities. It is designed to increase operational efficiencies and create awareness about reducing food waste and its environmental impact.

### ***Imperfectly Delicious Produce***

(IDP) is a program that utilizes non “retail” Grade A fruits and vegetables that have minor cosmetic imperfections. This produce is typically left un-harvested in the field or discarded but would be perfectly suitable for cooking. Our chefs slice and dice the produce for flavor and quality, its original shape is not important. Through this program, we engage our distributors and farmers to identify opportunities to rescue product from going to waste. We highlight produce with inconsistent sizing, shape, and color but not damaged or bruised product.

### ***Locally Sourced Produce***

Locally sourced produce is fresher, tastes better, supports your community, and is better for the environment. By focusing on local purchasing, we are able to reduce the miles required for delivery vehicles to deliver our products. Supporting the preservation of the American family farm, reducing the carbon footprint of our supply chain, and giving back to the local communities are central to our core values. We define “local” as typically within a 250-mile radius of San Jose State University. Charles W. Davidson College of Engineering

The Charles W. Davidson College of Engineering at San José State began modestly in 1946 with initial programs designed to support construction, manufacturing, and food processing. Today, this vibrant college community has grown to nearly 400 faculty and staff supporting more than 7,000 local and international students. Together they lead the charge towards addressing real-world, global challenges such as designing smart cities, re-envisioning transportation, securing cyberspace, facilitating space technology research, engineering intelligent medicines, and providing practical solutions to underserved populations.



## Charles W. Davidson College of Engineering

The Charles W. Davidson College of Engineering at San José State began modestly in 1946 with initial programs designed to support construction, manufacturing, and food processing. Today, this vibrant college community has grown to nearly 400 faculty and staff supporting more than 7,000 local and international students. Together they lead the charge towards addressing real-world, global challenges such as designing smart cities, re-envisioning transportation, securing cyberspace, facilitating space technology research, engineering intelligent medicines, and providing practical solutions to underserved populations.

### Green Engineering Minor

The Green Engineering minor studies ways in which engineering can contribute to solutions to protect the environment, global resources, and human life. These solutions include designing technology and promoting processes and policies that are efficient and socially responsible. It also includes developing methods that are environmentally and human friendly as well as sustainable for the long term.

## Facilities Development and Operations

### Environmental Health and Safety

San José State University is dedicated to providing a safe and healthful, accessible and sustainable environment for its faculty, staff, students, and visitors.

Environmental Health and Safety (EHS) collaborates with the campus community to provide consultation and training on occupational health and safety standards and the management of hazardous materials. Periodic inspections are conducted to ensure compliance with environmental health and safety standards.

EHS provides safe [laboratory disposal guidelines](#) to ensure proper chemical usage and waste disposal.

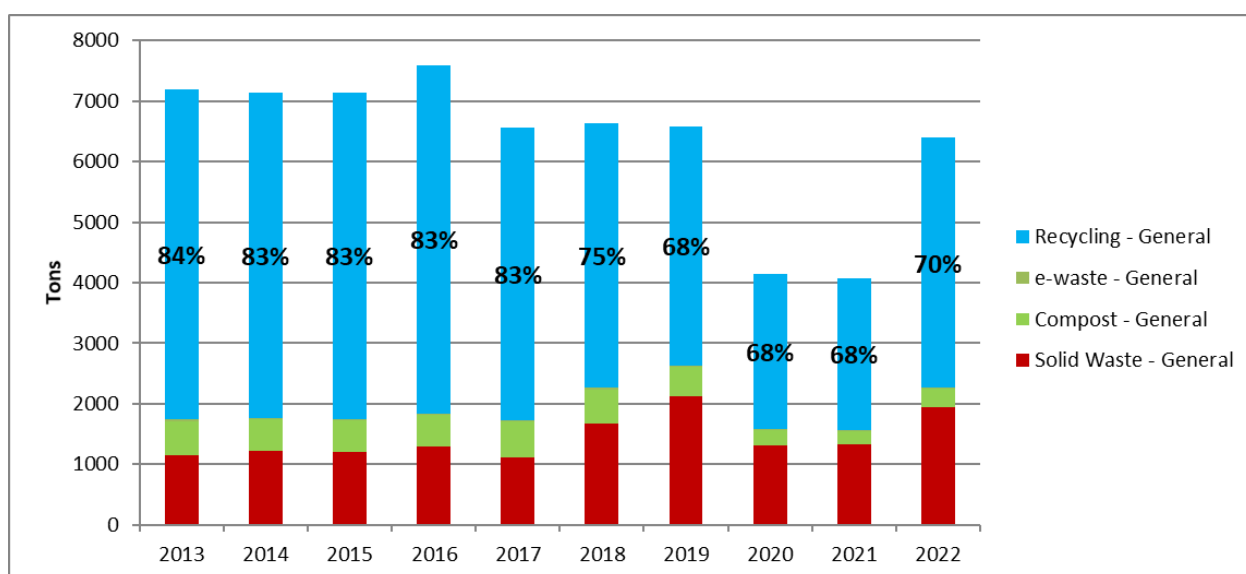


## Waste Diversion

The University is committed to reducing waste generated on campus, and, as a state agency, SJSU follows applicable policies and statutes.

SJSU continues to use [GreenWaste Recovery and a single stream collection process](#). All yard waste and food waste generated on campus is either composted at the hauler's facilities or used in a waste-to-energy facility. All other (mixed) waste is taken to the GreenWaste materials recovery facility (MRF), in which any recyclable and compostable items are removed from the trash and processed appropriately. The remaining small amount of waste, which cannot be diverted, is transported to the landfill or to a waste-to-energy facility.

In the past year, SJSU diverted 5,000 tons of materials from solid waste landfill/incinerators, while disposing of only 1,500 tons of materials. Our campus diversion rate for 2022 is 70 percent.



## Green Procurement

The [CSU Buy Recycled Campaign](#) is a joint effort between the campuses and the administrative offices of the CSU in support of the State Agency Buy Recycled Campaign (SABRC). The CSU Buy Recycled Campaign was developed to comply with state laws requiring the procurement of recycled content products.

It is the CSU's policy to promote environmentally responsible procurement practices. Campuses are encouraged, whenever feasible, to maximize the purchase of goods that contain recycled content or may be recycled or reused when discarded.

SJSU main office supply vendor, Staples, has implemented a minimum order requirement that will reduce packaging, reduce deliveries, and reduce the amount of paper being printed (packing slips). Additionally, SJSU has a substitution program that automatically swaps out a product with a sustainable product.

SJSU has been steadily making progress on the [CSU Single Use Plastics Policy](#), instituted in 2019 to eliminate plastic straws, carryout bags, styrofoam food service items and single-use plastic water bottles by 2023. Almost all of the items have been eliminated from our campus as of January 2022.



## Mubadala Silicon Valley Classic Tennis Tournament

During the [Mubadala Silicon Valley Classic July 2022](#), SJSU Green Campus, Spartan Eats, the Campus Community Garden, and the San José Conservation Corps worked together to make the tournament zero waste (90% diversion from landfill) by only offering recyclable or compostable containers and donating leftover food.

“The Mubadala Silicon Valley Classic organizers understand the importance of protecting the environment and we’ve taken exciting strides toward producing a more sustainable event,” said Vickie Gunnarsson, Mubadala Silicon Valley Classic tournament director.

The tournament was successful in achieving zero waste, with 95% of the over 4,500 lbs of waste generated going to composting or recycling, and 1,600 meals donated to Hunger at Home.



## RESEARCH INSIGHT

### Efficient Recovery of Rare Earth using *Methylobacterium Extorquens*

By Dr. Elizabeth Skovran, Associate Professor, Biological Sciences, College of Science

Rare earth elements (REE) have applications in various modern technologies, e.g., semiconductors, mobile phones, magnets. They are categorized as critical raw materials due to their strategic importance in economies and high risks associated with their supply chain. Therefore, more sustainable practices for efficient extraction and recovery of REE from secondary sources are being developed.

The Skovran laboratory focuses on understanding the metabolism and physiology of methylotrophic bacteria to advance our engineering efforts in the biomining and biorecycling of lanthanide elements (rare earths) and the production of biodegradable plastics.







## SDG 13 Climate Action

*Take urgent action to combat climate change and its impacts*

- 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters**
- 13.2 Integrate climate change measures**
- 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning**



We want to use the art of poetry to wake up others to our urgent concerns about all the damage being done to our planet — and at the local level to our communities — before it's too late,” said Professor of English and Director of Creative Writing Alan Soldofsky.



From our multiple research centers that focus on solutions to climate change to our progress in building a less carbon intensive campus, SJSU has been demonstrating its commitment to climate action for years. According to the '23 National Science Foundation Higher Education Research and Development survey, SJSU is #1 in research among all non PhD granting universities. SJSU's research, scholarship, and creative activity (RSCA) has grown more than 53% in the last 4 years, with plans to double research spending by 2030. Many faculty and students are examining a fascinating array of research issues that impact climate change.

### College of Science

#### [Department of Meteorology and Climate Science](#)

The only one of its kind in the CSU system, the Department of Meteorology and Climate Science provides students with an in-depth knowledge of the atmosphere, preparing them for careers in the atmospheric sciences. Meteorology focuses on day-to-day weather; in climate science the focus is on the evolution of Earth's climate.

The BS Climate Science program is designed to prepare students for careers in emerging fields of climate change studies and mitigation, and related fields including energy and carbon management.

### College of Engineering

San José State University's Charles W. Davidson College of Engineering received an important funding award from the U.S. Department of Energy that will allow the college to play a substantive technical role in Silicon Valley's green energy arena. The Department of Energy allocated \$7 million in funding from the Biden Administration's Bipartisan Infrastructure Law to expand the [Industrial Assessment Center \(IAC\) program](#), to help businesses create sustainable and cost-efficient processes and operations through energy savings and reduced waste.

Students will perform energy assessments for small- and medium-sized manufacturing businesses and water/wastewater treatment plants — at no cost to the companies. Over a five-year period, \$1.4 million will be directed to SJSU, with the College of Engineering overseeing the grant program.



## College of Humanities and the Arts

### Sustainable Futures

Sustainable Futures is a thematic programming opportunity in the College of Humanities & the Arts at SJSU. Starting in 2021-2022 and continuing in 2023, a number of engaging, community-oriented workshops, performances, talks, and art exhibits address sustainable fire management, food scarcity, sustainable design, poetic renderings, sustainability and user interface design, climate visualization, poetic postcards, ecoacoustic series, and poetry as environmental justice.

To support this engaging programming, after the success of the 2020-2021 Pandemic Pandemonium, and in collaboration with SJSU's Office of Sustainability, we invited faculty in the College of Humanities and the Arts to create robust assignments and/or curriculum that engage with issues of sustainability. Assignments were selected for recognition to be featured on the Office of Sustainability website and faculty were awarded honoraria. Given the issues of sustainability prevalent in both the nation and the state of California, the question of what a sustainable future looks like is one we all must face, and that the arts, design, and humanities are some of the best avenues to explore. In their assignments, faculty addressed the question of "How can you embed these pressing questions about Sustainable Futures into your curriculum?" The award-winning assignments were also recognized for their attention to robust and engaging instructional design. In addition, at least 15 performances, workshops, lectures, or events addressing these issues have occurred each year around Sustainable Futures.

### ***Department of English and Comparative Literature***

Since 2020, in honor of National Poetry Month in April, San José State University's Poets and Writers Coalition, in association with the SJSU College of Humanities and the Arts and Poetry Center San José, hosts an annual [Legacy of Poetry Fest](#).

In 2022, the theme of the festival "Can Poetry Save the Planet?", a call to action to fight climate change. "As human beings and poets, we're all worried — even disturbed — about climate change and extreme weather, wildfires and the COVID-19 pandemic. We are looking to share our emotions about these issues. We want to use the art of poetry to wake up others to our urgent concerns about all the damage being done to our planet — and at the local level to our communities — before it's too late," said Professor of English and Director of Creative Writing Alan Soldofsky.

Similarly, in April 2023, the Legacy of Poetry Fest focused on "Feeding our Hunger." "The focus is on how poetry responds to the region's food insecurity and can become a vehicle for sharing food culture(s)," said Soldofsky. "The festival's goal is to demonstrate how poetry can increase empathy and engagement with issues of hunger and food insecurity on the SJSU campus community and the surrounding region."

### ***Hammer Theatre Center***

Among many other programming events, the Hammer Theatre Center featured two events, the first sponsored by the College of Humanities and the Arts. "[Treelogy](#)," an original musical composition by three different composers, each one celebrating one California tree — the redwood, the sequoia, and the Joshua tree — appeared at the Hammer in February. In preparation for this, the college sponsored an event which extended the understanding of climate change through the Wildlife Interdisciplinary Research Center, which brought equipment to the Hammer, and a panel, including an artist, a musician, and a social scientist, all of whom explored our changing climate world through art and research.

The second event, "[Hidden Life of Water](#)", sponsored by the Art and Art History and Environmental Studies departments. The event explored current event topics regarding rainfall and climate change with a panel of speakers, poetry and informative performances.



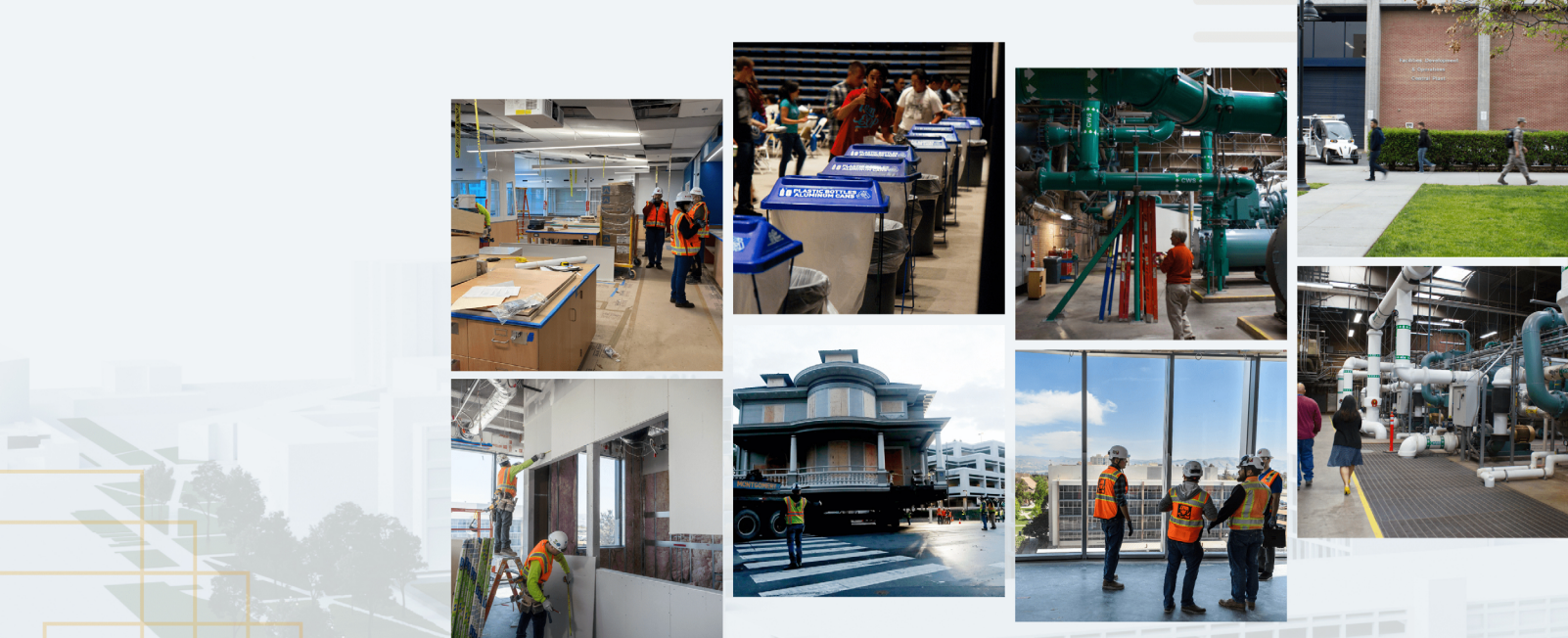
## Green Ninja

[Green Ninja](#) started as a research program at SJSU. With funding from the National Science Foundation, NASA, and PG&E, Professor Eugene Cordero has led a collaboration of students, scientists, and media artists to create the Green Ninja, a climate action superhero who forms the center of an education and behavior change program targeted at reducing our collective carbon footprint and aimed at educating sixth- to eighth-grade students.

## Climate Change and Extreme Events Training and Research (CCEETR)

Climate change and the consequential impacts of increased sea-level rise, coastal storms, landslides, extreme temperatures, wildfires, and inland flooding now pose a significant risk to the North American freight and passenger rail network. A \$4.6 million grant from the Federal Railroad Administration, awarded to Mineta Transportation Institute in the summer of 2022, will establish the [Climate Change and Extreme Events Training and Research \(CCEETR\) program](#), a multi-university consortium that will study risk mitigation strategies and preventative measures to improve the American rail network's resiliency and to make train travel safer for passengers, cargo and the environment.





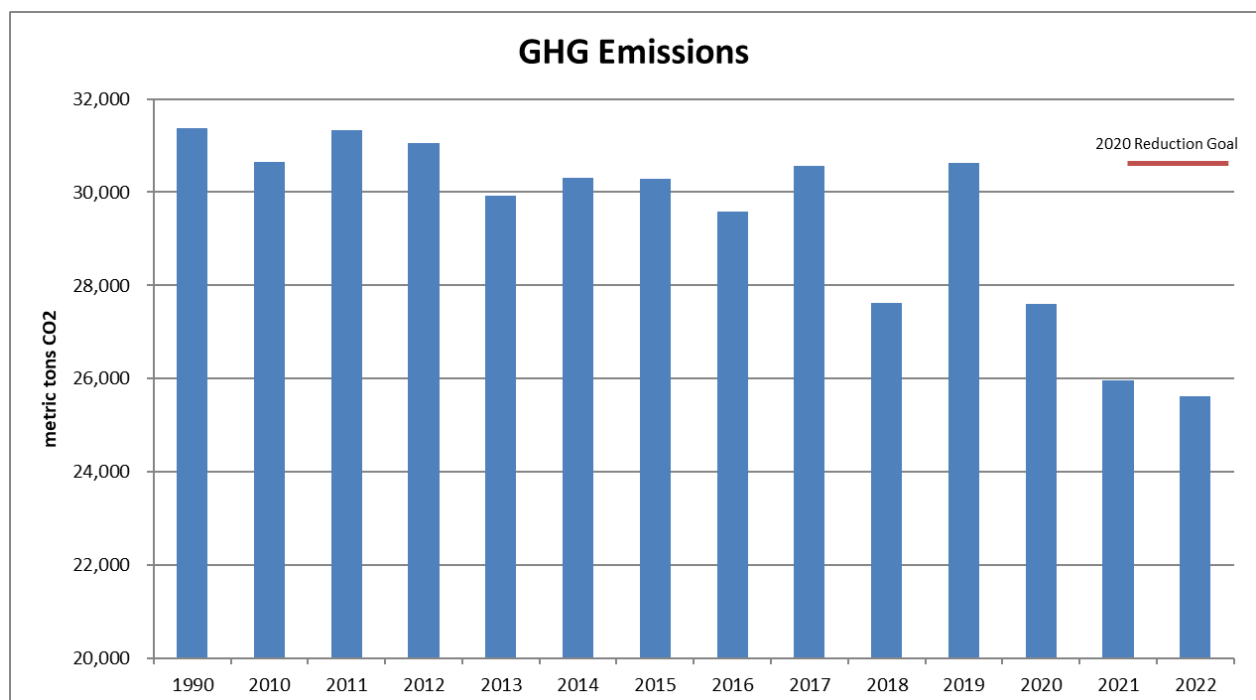
## Facilities Development and Operations

Continuous improvement in energy management has maintained a steady decrease in our energy intensity and GHG emissions. We successfully reduced GHG emissions to our 1990 levels in 2013 and in 2022, we reduced our levels to 18% below our 1990 levels. The campus energy intensity reduced by 20% from 2010, despite an increase in campus square footage at the end of 2018.

The 2023 Campus Master Plan includes the following carbon reduction targets for our campus:

- Reduce greenhouse gas emissions 80% below 1990 levels by 2040
- Carbon neutrality by 2045.

The SJSU Cogeneration Plant has been operating on our campus since 1984. The Central Plant includes the Allison 501KH gas turbine, absorption and centrifugal chillers, backup boiler plant with water tube boilers, air emission systems, compressors, generators, water purifiers, and other mechanical equipment. The 5.6 MW Cheng Cycle® plant provides steam for heating and cooling for campus buildings. About 80% electricity needed for the campus is provided by the cogeneration system. The rest of our energy needs are met through purchasing power from PG&E, which has one of the lowest carbon emission factors in the country.





## Washington Square Magazine

Washington Square magazine, SJSU's university and alumni magazine, featured faculty, students and alumni who are conducting research related to climate change in the [spring 2023 issue of the magazine](#).



## RESEARCH INSIGHT

### Collaborative Research: The role of the Southern Ocean in Late Miocene climate change

By Dr. Elizabeth Walsh, Assistant Professor, Department of Meteorology and Climate Science, College of Science

Concern over rising global temperatures makes it important to predict future climate change. However, to predict future climate requires a better understanding of how the climate system works in a warmer world. One way to better understand future warmth is to look at a warm period in the past. The project will explore one of the most recent periods of long-term warmth, the late Miocene, approximately 5 to 8.5 million years ago. The Miocene was characterized by warmer temperatures globally, and particularly in the polar regions. However, currently models are not able to correctly hindcast Miocene temperatures and often underestimate the warming. The ability to predict and understand this warmer world is limited by the availability of observations from the late Miocene. This is particularly true of the Southern Ocean, the area of ocean around Antarctica. This region plays an important role in controlling global temperature changes because it interacts with atmospheric carbon dioxide through physical processes (e.g., ocean mixing) and biological productivity (e.g., photosynthesis). Currently, there are no records of surface ocean temperature or biological productivity from the late Miocene for the Pacific sector of the Southern Ocean. This project will generate records of late Miocene oceanographic conditions in this region, including ocean surface temperature and biological productivity. These data will document how warm the Southern Ocean was during the late Miocene. The data will also provide key insights into how climate in a warmer world responds to changes in atmospheric carbon dioxide. Finally, the study will assess how processes in the Southern Ocean may have contributed to the cooling of the globe at the end of the Miocene.



## SDG 14 Life Below Water

*Conserve and sustainably use the oceans, seas and marine resources for sustainable development*

- 14.1 Prevent and significantly reduce marine pollution of all kinds**
- 14.2 Sustainably manage and protect marine and coastal ecosystems**
- 14.3 Minimize and address the impacts of ocean acidification**
- 14.4 Effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans**
- 14.5 Conserve at least 10 percent of coastal and marine areas**
- 14.6 Prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing**
- 14.a Increase scientific knowledge, develop research capacity and transfer marine technology**
- 14.b Provide access for small-scale artisanal fishers to marine resources and markets**

The health of our oceans are a precursor to the health of the planet, wrote Assemblymember Mark Stone in his budget request. He noted Moss Landing Marine Lab's position as a leading teaching and research institution that advocates for sustainable ocean systems, one that educates the public on how the health of the oceans, coastlines and sea life directly affect society.

SJSU finished in the top 15 among US universities in the Times Higher Education (THE) 2022 Impact Rankings for "Life Below Water" due to the work conducted at Moss Landing Marine Laboratories. In this category, THE focuses on how "universities are protecting and enhancing aquatic ecosystems like lakes, ponds, streams, wetlands, rivers, estuaries and the open ocean." SJSU's scores in water-sensitive waste disposal and research helped elevate the university high in the rankings.

### Moss Landing Marine Laboratories (MLML)

The mission of [MLML](#) is to provision the marine scientists of the future. An outfitted marine operations department, active research diving program, and state of the art equipment allow for cutting-edge research in a wide variety of disciplines, including marine ecology; the biology of marine plants, invertebrates, fishes, turtles, birds and mammals; oceanography and marine geology; and chemistry and biogeochemistry. MLML is known for a hands-on, field-oriented approach which places our students, faculty, researchers, and staff at the frontiers of marine science worldwide where discoveries are being made. MLML provides the skills and training so students become successful scientists, teachers, and resource managers serving societal needs involving marine issues.





MLML offers educational and research programs focused on better irrigation practices, aquaculture, fisheries management, and international shipping practices. MLML engages in research that, among others, actively monitors the health of the surrounding aquatic ecosystems off of Moss Landing.

This summer, MLML was awarded a \$3 million earmark in Governor Newsom's state budget to fund enhanced infrastructure for MLML's oceanic research. Specifically, the funds will go toward the refurbishment of Del Mar wharf, the dock where its research vessels tie up. "Many of the infrastructure improvements we'll be able to make will be devoted to climate change research, such as ocean acidification, threatened marine species, rising sea levels, and food sustainability through aquaculture and fisheries management. We're grateful for the state funding and for Assemblymember Stone's support," said Ivano Aiello, MLML's interim director.

## Research and Research Publications

SJSU researchers study the effects of climate change on commercially important fishery species. At the MLML Aquaculture Facility, researchers simulate future changes in ocean chemistry to examine the impacts of ocean acidification and hypoxia on multiple life stages of fish. SJSU researchers test how these environmental stressors affect fertilization success, embryo development, larval performance, olfactory capabilities, brain function, metabolic physiology, and swimming capabilities of rockfish, flatfish, and many other species. In addition, SJSU researchers are working to develop sustainable aquaculture solutions to mitigate the effects of climate change on this rapidly growing industry. By creating land-based integrated multi-trophic aquaculture (IMTA) systems for the co-culture of seaweeds and shellfish, the researchers can boost the growth of abalone, buffer seawater to limit the effects of ocean acidification, and provide additional aquaculture products to expand farmer portfolios.





### California Collaborative Fisheries Research Program – monitoring and evaluation of California marine protected areas

By Dr. Richard Starr and Dr. Scott Hamilton, Moss Landing Marine Laboratories, College of Science

The California Collaborative Fisheries Research Program (CCFRP) is a community-based science program involving researchers from six California universities, the captains and crew of 36 sportfishing vessels, more than 1,800 volunteer anglers, and partnerships with conservation and resource management agencies. By combining the expertise and ideas of a diverse group, we have successfully established protocols to evaluate Marine Protected Areas (MPAs), the status of nearshore fish stocks, and how climate change is impacting marine resources in California.

The CCFRP was designed to do scientific monitoring of California's network of MPAs in order to evaluate their effectiveness as a tool for conservation and fisheries management per the Marine Life Protection Act (est. 1999). In 2006, Dean Wendt of Cal Poly, San Luis Obispo and Richard Starr of Moss Landing Marine Labs teamed up with members of the fishing community to form the CCFRP. The program has since expanded statewide to survey MPAs all along the California coastline from Humboldt down to San Diego.

In 15 years, the CCFRP have conducted close to 700 sampling trips, caught and released more than 190,000 fish from 96 different species, and tagged nearly 65,000 fishes. The project has generated estimates of relative abundance, length frequencies, biomass, diversity, community composition, and movements of fishes across the 16 MPAs and associated reference sites and contributed data to stock assessments of 9 species. It conducts extensive education and outreach to the angling community and has designed and deployed socioeconomic surveys to gather diverse information including opinions of recreational fishers about MPA performance, changes in sentiments towards MPAs following establishment, fisheries management, and attitudes towards conservation.



## SDG 15 Life On Land

*Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss*

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- 15.1 Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services**
- 15.2 Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests**
- 15.3 Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods**
- 15.4 Ensure the conservation of mountain ecosystems, including their biodiversity**
- 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and protect and prevent the extinction of threatened species**
- 15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources**
- 15.7 End poaching and trafficking of protected species of flora and fauna**
- 15.8 introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems**
- 15.9 Integrate ecosystem and biodiversity values into national and local planning, and development processes**
- 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems**
- 15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management**
- 15.c Enhance global support for efforts to combat poaching and trafficking of protected species**

SJSU has established the largest academic Wildfire Interdisciplinary Research Center (WIRC) in the United States with five new tenure-track faculty members and millions of dollars in new technology.

SJSU has a rich legacy of pioneering environmental programs focused on conservation. From founding one of the first Environmental Studies departments in the country to the establishment of the Wildfire Interdisciplinary Research Center, the largest of its kind in the U.S., SJSU offers many opportunities for faculty and students to dedicate their careers to environmental issues, bioconservation, and sustainable development.





SJSU

METEOROLOGY &  
CLIMATE SCIENCE

SAN JOSE STATE UNIVERSITY

FIRE WEATHER RESEARCH LABORATORY



## Environmental Studies Department

The [Department of Environmental Studies](#) was founded in 1970 and was one of the first such departments established in the U.S. We focus on a rigorous, systematic, and integrated approach to the study, management, and solution of environmental challenges. Environmental Studies is designed to prepare students for career opportunities in water resource management, biological resource protection, sustainable agriculture, renewable energy, environmental health and safety, environmental impact assessment, environmental restoration, and wilderness, park, and open space resource management.

In 2022, Best Accredited Colleges nominated SJSU Environmental Studies as #7 in Best Bachelor's Degrees in Environmental Science. SJSU Global Studies is also #28 on the Best International Studies Bachelor's Degrees.

## College of Science

### ***Biological Sciences Department***

The Conservation and Organismal Biology Program at San José State University is designed to provide biology majors with a diversified curriculum in conservation and wildlife management, entomology, zoology, and plant biology.

### **Geology Department**

As geoscientists, we're curious about the natural world and how all of its different components fit together. In our teaching and research, we investigate the fundamental processes that shape our environment: from the bottom of the ocean to the tops of mountains, from Earth's origin 4.5 billion years ago to today. This exploration of Earth's history, processes, and past life is critical for addressing present day societal challenges such as climate change and the conservation of our natural resources.

### **Wildfire Interdisciplinary Research Center (WIRC)**

WIRC is a National Science Foundation Industry-University Cooperative Research Center (IUCRC). We are a group of researchers who focus on all aspects of wildfire science and management to better understand fire in California and around the world. The core mission of the WIRC is to conduct high-impact wildfire research so that improved tools and policies can be provided to community and industry stakeholders around the world and to develop new prediction and observational tools to better understand extreme fire behavior in a changing climate. It is the largest academic wildfire interdisciplinary research center in the country.

In 2022, the WIRC was awarded a total of \$6.1 million in federal funding to develop four new facilities: a National Wildfire Data and Computing Hub, a Remote Sensing Facility, a Fire Dynamics Laboratory, and a Community Wildfire Resilience Laboratory, and much-needed retrofit of the facility's aging infrastructure.

### **Fire Weather Research Laboratory**

The lab's goal is to better understand wildland fire behavior by studying fire-atmospheric interactions. The lab provides the fire modeling community datasets for model evaluation and development. In addition, the lab provides community outreach to grade schools in the Wildland-Urban Interface. The Fire Weather Research Laboratory is the most well-equipped fire weather research laboratory in the United States, with a suite of assets including a network of remote fire weather stations, two 4x4 trucks equipped with Doppler lidar and radar, and an array of other laboratory facilities, sensor systems, and field equipment.

## Research and Research Publications

SJSU researchers employ bio-logging devices to locate and track the behavior of sea birds. For example, the albatross has been tracked on foraging trips to explore bird-fishery interactions and their proximity to shipping lanes. We also combine tools in biomechanics, animal behavior, and stable isotope ecology to understand how environmental changes influence the relationship between diet and morphology of a model invertebrate, the mantis shrimp. On land, SJSU researchers are examining fecal DNA from the American pika to study natural selection along environmental gradients in wildlife refuges of the western states.

## Native Plant Gardens

The Environmental Resource Center (ERC), Lars Rosengreen, the Greenhouse Manager with the Biological Sciences Department, and Facilities Development and Operations collaboratively began installing California native plant gardens south of MacQuarrie Hall on December 12, 2019. The second, larger landscaping project was installed on the south side of Morris Daily Auditorium. The gardens were planted with California native plants, particularly plants that are bee and bird friendly and drought resistant. Plants were chosen by the students in the ERC based on the native plants species grown in the greenhouse managed by Rosengreen.

### BEE Protective Campaign

Former President Mary Papazian signed the Bee Protective Campaign in Fall 2018. The Bee Protective Campaign is an initiative to encourage universities, institutions, and local municipalities to resolve to eliminate the use of bee-toxic pesticides on their grounds and to foster a healthier habitat by planting pollinator friendly plants. The campus recognizes the value of protecting honey bee populations and will not use bee-toxic pesticides and insect growth regulators on campus. SJSU will ensure that we have landscape services that encourage pollinator populations on campus.

## Associated Students Outdoor Adventures

Weekends are for creating memories, making new friends and going on adventures. Spartan Recreation offers students the chance to participate in epic [Outdoor Adventures](#) like hiking, camping, surfing, rock climbing, and mountain biking. All outings are led by student leaders and local experts who are ready to share their passion and outdoor knowledge with our students.



## RESEARCH INSIGHT

### Understory Response To Restoration Alternatives In A Sequoia Sempervirens (Cupressaceae) Forest

By Dr. Will Russell, Professor, Environmental Studies Department,  
College of Social Science

The use of mechanical thinning as a restoration tool in second-growth Sequoia sempervirens (D.Don) Endl. forests is becoming increasingly common, yet little is known about how this treatment affects understory plant communities. The shade-tolerant herbaceous species common to the Coast Redwood forest are known to be sensitive to disturbance and may provide a metric for assessing the recovery of the plant community as a whole. Pairwise permutational multivariate analysis of variance (PerMANOVA) indicated greater abundance of native herbs, and lower abundance of non-natives, in old-growth and naturally recovering second-growth compared to thinned stands. Non-metric multidimensional scaling suggested that un-thinned sites were more similar to old-growth than thinned sites in regard to understory composition and abundance, and indicator species analysis returned a suite of indicator species shared between naturally recovering plots and old-growth plots while thinned plots shared only one indicator species with old-growth. In addition, both old-growth and naturally recovering un-thinned second-growth sites were dominated by residual species, while thinned plots were dominated by invader species.



## SDG 16 Peace, Justice and Strong Institutions

*Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels*

- 16.1** Significantly reduce all forms of violence and related death rates
- 16.2** End abuse, exploitation, trafficking and all forms of violence against and torture of children
- 16.3** Promote the rule of law at the national and international levels and ensure equal access to justice for all
- 16.4** Significantly reduce illicit financial and arms flows
- 16.5** Substantially reduce corruption and bribery in all forms
- 16.6** Develop effective, accountable and transparent institutions at all levels
- 16.7** Ensure responsive, inclusive, participatory and representative decision-making at all levels
- 16.10** Ensure public access to information and protect fundamental freedoms
- 16.b** Promote and enforce non-discriminatory laws and policies for sustainable development

The Record Clearance Project through our Department of Justice Studies is the only program in the country that engages undergraduate students in learning and using legal skills to clear people's criminal records, maintaining a 99% success rate in court throughout the pandemic.

San José State finished in the top 15 in the U.S. in Peace, Justice and Strong Institutions in the [Times Higher Education \(THE\) 2022 Impact Rankings](#). According to THE, Peace, Justice and Strong Institutions focused on "universities' research on law and international relations, their participation as advisers for government and their policies on academic freedom." SJSU's university governance measures and work with local, state, and national governments played a role in the top 15 U.S. ranking.

### University Governance

Our [Academic Senate](#), formed in 1963, has elected representation from the faculty of each academic college and students elected to serve on the Senate by the student body. We also have critical administrators who serve as voting members on the Senate body, including the campus president and provost. We are currently examining ways to expand the senate to even better represent our campus and the current key constituencies. The Senate also helped to form the campus Staff Council and continues to support the Staff Council in their initiatives.

Within our university policies on several committees, we have embedded seats for local stakeholders who are external to the university (e.g., community members). Two critical examples are our Strategic Planning and Steering Committee co-chaired by the Provost and Senate Chair and our Accreditation Review Committee. These committees ensure accountability for our Strategic Plan and ensure that we retain our university accreditation.





# RECORD CLEARANCE PROJECT





The Academic Senate directly engages with local stakeholders by recruiting them for engagement and participation in many of our campus committees. The President's Office has government relations advocates who work at the local, state, and national levels and directly engage with stakeholders in those respective domains.

The university has two key policies that support academic freedom. S99-8: Academic Freedom and Professional Responsibility outlines faculty's right to pursue their own lines of research and to teach about their own research as part of their professional responsibilities. The second policy, S99-9: Board of Academic Freedom and Professional Responsibility, establishes a board charged with implementation of S99-8. This board is a campus resource for advising and guidance around issues of academic freedom and professional responsibility.

The [University Sustainability Board](#) functions as a university committee of the Academic Senate and advises and makes recommendations to the Academic Senate and the President in the following areas: setting and measuring progress towards meeting University-wide goals to promote sustainability across academic and non-academic divisions; and benchmarking SJSU sustainability efforts relative to state and national leaders in university sustainability. The Board serves as an advisory resource to academic departments on sustainability-related curriculum. The Board also works with appropriate units in the university as a resource for centralizing and effectively communicating information to the campus on SJSU's sustainability efforts; integrating sustainability into key planning documents and procedures; and educating and engaging with campus stakeholders on sustainability through research, projects, workshops, and other events.

## Annual Safety Report

In October of each year, the Office of the Vice President for Administration and Finance publishes the [Annual Safety Report](#) in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. The report contains important safety information, SJSU policies, and crime statistics for the previous three years.

## Transforming Communities: A Movement to Racial Justice

SJSU's "[Transforming Communities: A Movement to Racial Justice](#)," is a visionary annual event designed to catalyze change in our community. Events are hosted by the SJSU community focused on creating a more racially just and equitable city and county. Year three of this event seeks to highlight the continued work of communities throughout the South Bay. This year's theme is "Reclaiming Narratives, Building Community, and Achieving Justice," taking place November 1–15, 2023.

This event offers the opportunity for participants to gain a wealth of information and experience as they engage with content centered at the intersection of race and topics such as inequality, systemic injustice, community healing and restoration, human rights, sexuality and gender, and so much more.

## Research and Development

Engaging with partners from around the world and across campus, SJSU researchers are finding ways to right historical injustices in the environment. From tracking the impacts of transportation policies to monitoring environmental toxins to developing community gardens for education and to combat food deserts, SJSU is leading efforts in environmental injustice.

## Center on Ethics

The [Center on Ethics](#), through the College of Humanities and Arts, serves to inform the San José State community of pressing ethical issues in public and private life. Its activities include lectures, workshops, and conferences in addition to supporting teaching and research across the disciplines. The Center on Ethics is committed to the comprehensive exploration, both scholarly and applied, of ethical and socially responsible practices represented on the campus of San José State University and within Bay Area educational, business, professional, and civic communities.

## Department of Justice Studies

The [Department of Justice Studies](#) in the College of Social Science, embraces an interdisciplinary approach to engage students in critical analysis of justice systems in practice, policy, and research. We equip students to be leaders, professionals, and agents of change in justice-related institutions and in diverse local and global communities.

Our foremost desire is to foster just societies. We value intellectual curiosity, lifelong learning, honesty, fairness, and ethical consideration of our actions. We embrace diversity, inclusion, civility, and sustainable practices as foundations for strong communities. We commit ourselves to promoting global understanding and respect for cultural differences. We honor our relationships with students, colleagues, alumni, and community partners who work with us to achieve our mission.

### ***The Record Clearance Project***

Founded at SJSU in 2008, the [Record Clearance Project](#) is powered by people who recognize the harm inflicted by the criminal legal system. Since most RCP clients are people of color, this work aims to undo the discriminatory impact caused by the legal system through an anti-racist lens that seeks to empower our communities. Since its founding, the team has spoken to nearly 13,000 people, including 4,000 in custody.

SJSU Justice Studies instructor Margaret Stevenson founded the RCP as a way to give students hands-on experience with the law, the court system, and the people involved. The RCP is a unique undergraduate curriculum and essential community resource. This program provides experience that students would not otherwise gain outside of law school, enabling them to use the law and their education to change lives for the better. The RCP assists thousands of people each year with criminal convictions who cannot afford an attorney, enabling them to pursue their legal rights to a full, productive future.



## RESEARCH INSIGHT

### Understanding the Role of Transportation in Human Trafficking in California

By Dr. Kezban Yagci Sokat, Associate Professor, Department of Marketing and Business Analytics, Lucas College and Graduate School of Business

Human trafficking, a form of modern slavery, is the recruitment, transport, and/or transfer of persons using force, fraud, or coercion to exploit them for acts of labor or sex. According to the International Labor Organization, human trafficking is the fastest growing organized crime with approximately \$150 billion in annual profits and 40.3 million individuals trapped in slave-like conditions. While it is not compulsory to involve transportation for human trafficking, the transportation industry plays a critical role in combating human trafficking as traffickers often rely on the transportation system to recruit, move, or transfer victims. This multi-method study investigates the role of transportation in combating human trafficking in California by conducting a survey followed up with semi-structured in-depth interviews with key stakeholders. The expert input is supplemented with labor violations and transit accessibility analysis. Experts emphasize the importance of education, training, and awareness efforts combined with partnership, data, and analysis. Screening transportation industry personnel for human trafficking is another step that the industry can take to combat this issue. Particularly, sharing perpetrator information and transportation related trends among transportation modalities and local groups could help all anti-trafficking practitioners. In addition, the transportation industry can support the victims and survivors in their exit attempts and post/exit life. Examples of this support include serving as a safe haven, and providing transportation to essential services. Transportation should ensure that all of these efforts are survivor-centric, inclusive for all types of trafficking, and tailored to the needs of the modality, population, and location.



## SDG 17 Partnerships for the Goals

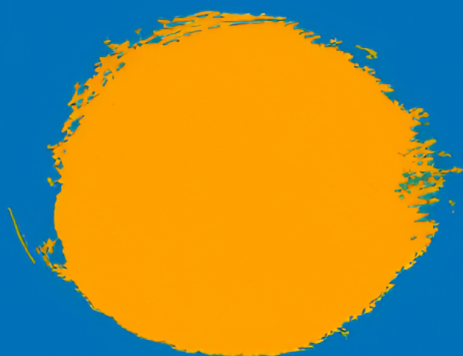
*Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development*

- 17.2 Ensure that developed countries fully implement their official development assistance commitments**
- 17.3 Mobilize additional financial resources for developing countries from multiple sources**
- 17.4 Assist developing countries in attaining long-term debt sustainability**
- 17.5 Adopt and implement investment promotion regimes for least developed countries**
- 17.6 Enhance North-South, South-South and triangular regional and international cooperation, access to science, technology and innovation, and knowledge sharing**
- 17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries**
- 17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for the least developed countries**
- 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries in order to support national plans to implement all the sustainable development goals**
- 17.11 Significantly increase the exports of developing countries**
- 17.14 Enhance policy coherence for sustainable development**
- 17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development**
- 17.16 Enhance the global partnership for sustainable development**
- 17.17 Encourage and promote effective public, public-private and civil society partnerships**
- 17.18 Enhance capacity-building support to developing countries, including for least developed countries and small island developing states, to increase significantly the availability of high-quality, timely and reliable data**
- 17.19 Build on existing initiatives to develop measurements of progress on sustainable development**

There are many ways in which Spartans are studying and engaging with a changing world. From ocean health to outer space and every point in between, the focus on climate science and saving our planet continues at San José State, where research opportunities continue to grow.

When journalist and author Thomas Friedman famously asserted that “the world is flat,” he meant, at least in part, that industry had evolved into a vast and global—yet interconnected—supply chain that extends across nations and continents.

Development of global citizens at SJSU is a necessity, not a luxury. We are educating students who will be a part of our “flat” world. The faculty and senior leadership at San Jose State recognize that we are living in a global economy—a global society—and that our curricula must consistently take into account the global aspects of every academic discipline.





## University Governance

The [Community and Government Relations Team](#) coordinates closely with the CSU's Office of Federal Relations, other universities, and national higher education associations like Association of Public and Land-Grant Universities (APLU), American Council on Education (ACE) and [Association for the Advancement of Sustainability in Higher Education \(AASHE\)](#) on activities that align with and connect to national government SDG policy development. SJSU utilizes the expertise of such entities and organizations primarily to assist in identifying challenges and problems, as well as potential strategy and policy solutions. Coordination includes regular meetings and consistent dialogue focused on addressing a range of issues connected to SDG policy development broadly. Where applicable, SJSU will provide leadership on activities where we have expertise and capacity. SJSU will continue to seek out new partnerships and opportunities to provide direct input into national SDG development.

SJSU informs and advocates for legislation that advances the social mobility of our students and for policies that grow the economy for all. We inform and advocate by providing formal testimony at State Assembly Select Committees and Standing State Assembly and Senate Committees, as well as traditional advocacy methods such as letter writing and participation in committees and task forces.

## Silicon Valley Center for Global Studies

The [Silicon Valley Center for Global Studies \(SVCGS\)](#) through the College of Professional and Global Education seeks to bring new dimensions in international scholarship to the heart of Silicon Valley. Projects undertaken by the center will seek to benefit the community broadly through the involvement of different SJSU units and global academic partners in a range of public-private partnership opportunities.

## Lucas College and Graduate School of Business

### ***Global Leadership Advancement Center***

Established in 2009, the [Global Leadership Advancement Center \(GLAC\)](#) is a research and training institute located in the Lucas College and Graduate School of Business (LCoB). Students and researchers can enhance their learning through GLAC's extensive research, professional development, and social innovation initiatives.

While the need for experienced and innovative leaders is urgent in all areas of global business, SJSU is one of the few universities world-wide to offer extensive cutting-edge global leadership courses and programs to undergraduates, graduate students, and executives.

### ***EMBA Consortium for Global Innovation***

The LCoB is part of the [EMBA Consortium](#), a network of ten international universities exchanging graduate students for a week of a full-immersion professional education program with a global dimension. Each host institution specializes in one aspect of business and educates students from developing and developed countries through lectures, workshops, and visits to businesses and governmental organizations.

## College of Social Sciences

### ***Global Studies Program***

The purpose of our program, housed in the Department of Environmental Studies, is to better understand global phenomena that bridge or know no boundaries and apply that knowledge to becoming better global citizens. Examples of global phenomena include rivers crossing international boundaries, Pokemon, and the complex supply chain that resulted in the production of your smartphone. We pride ourselves on being a unique interdisciplinary degree program that allows students to take classes from over a dozen different departments at SJSU ranging from Anthropology to Engineering. A unique highlight of our program is a culminating study abroad opportunity that our students describe as "life changing." Global Studies majors and minors learn to look at the world critically and holistically.

They also learn to appreciate and understand other cultures. By taking a set of core classes in issue and theory, combined with electives in sustainability, security and technology, development and human rights,

and culture and society, global studies students develop the mature perspective needed to thrive and lead in today's complex world. Recent Global Studies graduates have gone on to a wide variety of jobs right after graduation in education, healthcare, the Peace Corps, and high tech. Annually, several graduates also continue on to graduate school in fields such as law, medicine, and international relations.

### **Department of Political Science**

The [Department of Political Science](#) has a long and rich history. Formed in 1962, a time when San José State University was known as San José State College, more than 4,000 students have earned a bachelor's degree in political science. Faculty, students and staff of the Department of Political Science engage in teaching and learning critically and systematically about politics, public affairs, public institutions, and their problems. Our mission thus embraces elements of the liberal arts, citizenship, and social science education. A major strength of SJSU's student body is its diversity. Our students vary in their economic status, ethnic background, age, experience, and educational objectives. The department's courses and programs respond to this diversity, offering our students knowledge and skills essential to citizenship as well as pre-professional education in preparation for a variety of careers or for graduate school.

## **General Education Program**

One of the goals of San José State's General Education program is "to enact the university's commitment to diversity, inclusion, and justice by ensuring that students have the knowledge and skills to serve and contribute to the well-being of local and global communities and the environment." The 16-course general education program requires all students to complete an [Earth, Environment, and Sustainability](#) course in which students apply the scientific method and quantitative reasoning to engage in ethical, civic-minded inquiry related to sustaining the earth, its environments and its inhabitants. Students also complete a Self, Society, and Equality in the U.S. course in which they study the interrelationships of individuals, racial groups, and cultural groups to understand and appreciate issues of diversity, inclusion, inequality, and justice in the United States. By exploring different perspectives and helping students articulate and discuss their own values, these courses prepare students to live and work responsibly and cooperatively in a multicultural society.



## **RESEARCH INSIGHT**

### **Public Infrastructure and Economic Development: Evidence from Postal Systems**

**by Dr. Matthew Maguire, Assistant Professor, School of Management,  
Lucas College and Graduate School of Business**

Although postal systems have been central to state-building efforts around the globe, their contributions to development are largely unclear. We argue that the post office affected economic development in both the short and long terms. To test our argument, we combine original data on the cross-national distribution of postal systems from 1875 to 2007 with granular county-level data in the United States from 1850 to 2000. In both country- and county-level analyses, we show that the spread of postal systems affected economic outcomes in the short and long terms. The results are robust across dependent variables, model specifications, and estimation strategies. We provide additional evidence that suggests these effects were generated by reducing transaction costs and strengthening social capital. Our findings highlight the role of public infrastructure in promoting economic growth, documenting a channel through which state institutions precede growth, and suggest that state-building efforts have long-standing effects on relevant communities.



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