CERRITOS COLLEGE

SUSTAINABILITY FRAMEWORK

October 2023

DLRGROUP

Letter from the Executive Vice President

Cerritos College's commitment to sustainability was first formally recognized during the June 18, 2014 meeting when the Board of Trustees adopted Board Policy 3580 titled "Environmental Sustainability." Additionally, on November 21, 2021, our Board of Trustees further reinforced this commitment by endorsing the "Break Free from Plastic" resolution.

To further our sustainability mission, Cerritos College assembled a team of dedicated professionals tasked with updating the sustainability plan. This plan serves as our roadmap to actualize the district's vision, encompassing key areas of focus such as campus resources, resilience, connectivity, open spaces, resource conservation, inclusive environments, and academics. These Impact Areas reflect the framework and core VALUES collectively established by Cerritos College, shaping our path towards a sustainable future.

From this Framework emerged a theme that captured the vision around the future of our campus.

"Where sustainable practices and academic excellence meet to cultivate a greener tomorrow."

Cerritos College supports the principles of sustainability and academic excellence, uniting a path toward a greener and more sustainable future.

Felipe Lopez
Executive Vice President

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EXECUTIVE SUMMARY

Cerritos College- where sustainable practices and academic excellence meet to cultivate a greener tomorrow.

Vision

Cerritos College is an environmental leader. The district is dedicated to sustainability practices and policies that conserve the planet's diminishing natural resources. The following vision statement, established in the 2016 Sustainability Plan, guided Cerritos College in this effort:

"Cerritos College will adopt a culture of sustainability through quality educational curriculum, promote core values through institutional best practices, and provide community leadership through actions and partnerships; thus creating an awareness that fosters sustainable practices, resource conservation and environmental stewardship that benefits the college, community, and nation." (2016)

During the process of developing this Framework, stakeholders created the following aspirational headline to capture Cerritos College's vision around the future of sustainability on campus:

> ***"Where sustainable practices and academic excellence meet to cultivate a greener tomorrow."***

This statement intentionally blends the academic mission with the well-being of the Cerritos College community, through the futuristic lens of successful student outcomes.

Purpose of This Framework

The objective of this Sustainability Framework is to set the guiding principles and broaden the District's current vision to include priorities for wellness, mental health, and resilience of the campus community. This is a holistic guide for implementing sustainability on the campus, will support continued awareness, development, and improvement to ensure that the College is ready to meet its mission through a healthy and resilient environment.

Past planning efforts guided the development of this Framework. These past efforts include the District's 2016 Sustainability Plan, which identified the impact areas of health/wellness and climate resilience, and the California Community Colleges Chancellor's Office Climate Action and Sustainability Goals. This document distills a unique set of complex sustainability topics into a clear structure that the campus community can use to inform decision-making.

NAVIGATION TIP:
If you are viewing the Framework from an electronic device, click a topic in the table of contents to jump to that topic. Throughout the document, click the RED BUTTONS to return to the table of contents or open the specified hyperlinks.

Planning Context

Cerritos Community College District is a two-year public community college and is one of the five largest community colleges in Los Angeles County. Founded in 1955, the college has an average enrollment of approximately 22,000 credited students annually. The District is a single-campus district and will be referred to throughout this Framework as "Cerritos College," "Cerritos," or "the District" interchangeably. Cerritos College serves the communities of Artesia, Bellflower, Cerritos, Downey, Hawaiian Gardens, La Mirada, Norwalk, and portions of Bell Gardens, Lakewood, Long Beach, Santa Fe Springs, and South Gate. Four districts serving high school students are contained in these communities. They are the ABC Unified School District (USD), Bellflower USD, Downey USD, and Norwalk-La Mirada USD. The Cerritos Community College District is one of 73 community college districts within the California Community College system, which encompasses 116 community colleges.

The Cerritos College community continues its commitment to building a campus that recognizes the environmental, economic, and social benefits of a sustainable future.

MEASURING AGAINST NATIONAL BENCHMARKS

The state of California is at the forefront of sustainability policy and regulations, with many of its college and university campuses ranked among the greenest in the nation. The best practices found at these institutions are showcased on a yearly basis through the national conference of the Association for the Advancement of Sustainability in Higher Education (AASHE) and the California Higher Education Sustainability Conference (CHESC). These important congregations illustrate the broader nationwide and statewide context and the active role of higher education in sustainability.

GENERAL OBLIGATION BOND

On November 8, 2022, voters approved Cerritos College's $425 million General Obligation Bond measure, funding renovations to the campus. Renovations will include razing nine buildings, renovating five buildings, and constructing 10 new buildings to improve the quality of Cerritos College. Sustainability goals and actions underpin decisions made about these important investments in the campus and will help create a thriving future campus environment.

CHANCELLOR'S OFFICE CLIMATE ACTION AND SUSTAINABILITY GOALS

Listing a comprehensive set of targets, tools, and goals, the California Community Colleges Chancellor's Office (CCCCO) Climate Action and Sustainability Goals strives for bold climate action and sustainability, serving as a guiding resource for Cerritos College. It outlines considerations for advancements in campus sustainability efforts by focus area, including Greenhouse Gas (GHG) Emissions Reduction, Green Buildings, Energy, Water, Waste, Purchasing and Procurement, Transportation, and Food Systems. This guidance was integrated throughout the development of this Sustainability Framework.

Triple Bottom Line Sustainability

Triple Bottom Line Sustainability is an economic framework that encourages organizations to consider the environmental, economic, and social performance of their decisions. Sometimes referred to as the "three Ps" (People, Planet, Profit), measuring success based on the triple bottom line will help Cerritos holistically evaluate the impacts of sustainability investments and balance competing priorities.

1 **ENVIRONMENTAL**

Environmental sustainability encompasses ecological systems and the natural resources required to sustain them. Cerritos has committed to reducing resource use and encouraging environmental stewardship through its commitment to setting a pathway to achieving climate neutrality by 2030. Additionally, Cerritos promotes educational efforts that address the impact of climate change on the Cerritos community.

2 **SOCIAL**

Social sustainability means respecting and sustaining cultures, social systems, and human well-being worldwide. Community resilience is built through strong connections, shared values, and the protection of human health and well-being for all—decisions made at Cerritos impact the local community and neighboring communities. Cerritos policies, practices, and initiatives play a role in creating a more socially vibrant and just world.

3 **ECONOMIC**

Economic sustainability requires decision-making principles that lead us to sustain our resources without negatively impacting environmental or social systems. Economic systems produce the goods and services that enable survival and well-being and are essential to achieving sustainable development.

Successful campus sustainability initiatives are rarely led by one department or individual. It can be useful to dedicate time to educating stakeholders involved in sustainability and long-term planning programs on how the triple bottom line will be utilized for decision-making.

Embedding Resilience

Resilience is the capacity of individuals, communities, businesses, and systems to survive, adapt, and thrive no matter what type of climate and human-induced impacts they experience. Climate change presents an increase in both acute and chronic impacts for Cerritos College and its surrounding community, from heat waves to drought and flooding.

Effective resilience planning is multidimensional. A series of resilience assessment surveys and interviews established baseline strengths and vulnerabilities across the District.

SECOND NATURE'S CAMPUS EVALUATION OF RESILIENCE DIMENSIONS

Second Nature's Campus Evaluation of Resilience Dimensions helps higher education institutions assess resilience for their campuses and surrounding communities. By identifying strengths, vulnerabilities, and gaps in knowledge, institutions can set bold climate action goals that increase adaptation and resilience.

Including five dimensions, Second Nature's framework evaluates resilience holistically across infrastructure, economics, ecosystem services, social equity and governance, and health and wellness. This definition of resilience aligns with Cerritos's holistic approach to sustainability, considering not just ecology and resource conservation but human and community health and social sustainability. See PAGE 24 for the full Evaluation of Resilience Dimensions.

INFRASTRUCTURE	ECONOMICS	ECOSYSTEM SERVICES	SOCIAL EQUITY AND GOVERNANCE	HEALTH AND WELLNESS
HOUSING AND OTHER BUILDINGS	INSTITUTIONAL FINANCES	NATURAL AREAS	CIVIC ENGAGEMENT AND PARTICIPATION	FOOD SYSTEMS
TRANSPORTATION	INVESTMENTS IN RESILIENCE	CAMPUS PROPERTY	DIVERSITY	HEALTH CARE AND SERVICES
ENERGY		WASTE MANAGEMENT	RESILIENCE COMMUNICATION AND AWARENESS	SENSE OF PLACE
WATER SUPPLY			EDUCATION AND CURRICULUM	
EMERGENCY PREPAREDNESS				

To ensure an integrated approach to resilience, the resilience dimensions listed above are embedded across the seven impact areas of this plan. Each impact area addresses one or more resilience dimensions outlined in Second Nature's Framework.

This icon indicates that a given objective relates to an element of Second Nature's Framework. Keep an eye out for connections to resilience as you review objectives and actions.

Sustainability at Cerritos College

Cerritos College has a long history of environmental stewardship, led by both students and District leadership. From requiring LEED certification, a third-party verified green building certification program, for new buildings to becoming the first community college in California to adopt a Break Free From Plastic resolution, Cerritos College's strong culture of sustainability is evident.

Cerritos's academic programs prepare students for impactful careers in industries where sustainable transformations are most needed. The Advanced Transportation and Logistics Center coursework, for example, is training future automobile industry technicians in alternative fueled vehicles. Cerritos also provides various Earth Science courses which address topics such as weather and climate, energy and the way we live, and other energy-focused courses. Additionally, the college is a California Advanced Lighting Control Training Program provider and helping students prepare for careers in building technologies.

FACILITIES PLANNING COMMITTEE

The Facilities Planning Committee reviews and makes recommendations regarding the Campus Master Plan and the college's Scheduled Maintenance Plan. The committee also reviews and makes recommendations about campus modification projects.

The Facilities Planning Committee served as the advisory group for the Sustainability Framework. Cerritos College embraces shared governance as a collaborative decision-making process in which the members of each of the major campus constituencies – the Board of Trustees, administration, faculty, staff, and students – perform appropriate roles.

Image: Cerritos College campus sign. (Cerritos College Foundation Website)

Previous Sustainability Efforts

SUSTAINABILITY IN ACTION

2021

In November of 2021, the Board of Trustees adopted a Break Free From Plastic resolution, making the campus **the first community college in California to adopt a policy to abandon the use of plastic products**. The effort was led by student leaders, and the campus is in the process of creating an action plan to implement the policy.

2022

Cerritos College approved the Parking Lots 1 and 10 Solar Project. **This solar project will result in an 83 percent energy use offset for the campus**. After 20 years of use, Cerritos College is projected to generate over $16 million in energy savings.

2023

Cerritos College recently received the Green Award at the 2023 Foundation for California Community Colleges/ CollegeBuys Purchasing Conference. The award **recognized the Cerritos College Purchasing Department's commitment to sustainability** for its preference towards purchasing eco-friendly products.

A full timeline of prior initiatives and milestones are available on Cerritos College's website (linked below).

Prior notable initiatives influenced the development of this Framework:

- Former student government led initiatives.
- The Board of Trustees adopted (a) Board Policy 3580—a campus wide policy focused on developing and implementing best practices that promote energy efficiency and energy conservation; (b) Resolution No. 14-05 declaring that all new buildings in excess of $5 million must be LEED certified.

Green Cerritos

College Sustainability Initiatives

Cerritos College is an environmental leader. The District is dedicated to adhering to sustainability practices and policies that conserve the planet's diminishing natural resources. The District is creating a campus environment that fosters sustainability through conscious decision-making strategies, focusing on:

- Green facilities that meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) standards
- Energy efficiency and alternative energy sources
- Waste management
- Water conservation
- Instructional programs
- Reducing greenhouse gas emissions

LINK TO FULL DOCUMENT

Planning Process

The project timeline was broken out into several phases.

1 **PROJECT INITIATION**
Project Initiation involved confirming the project scope, schedule, and engagement strategy for the Sustainability Framework, and identified all elements to be taken into consideration throughout the project, including how success will be defined. The planning team also gathered a prioritization of data collected to inform the Sustainability Framework, and helped the Cerritos team analyze where The District is today concerning sustainability.

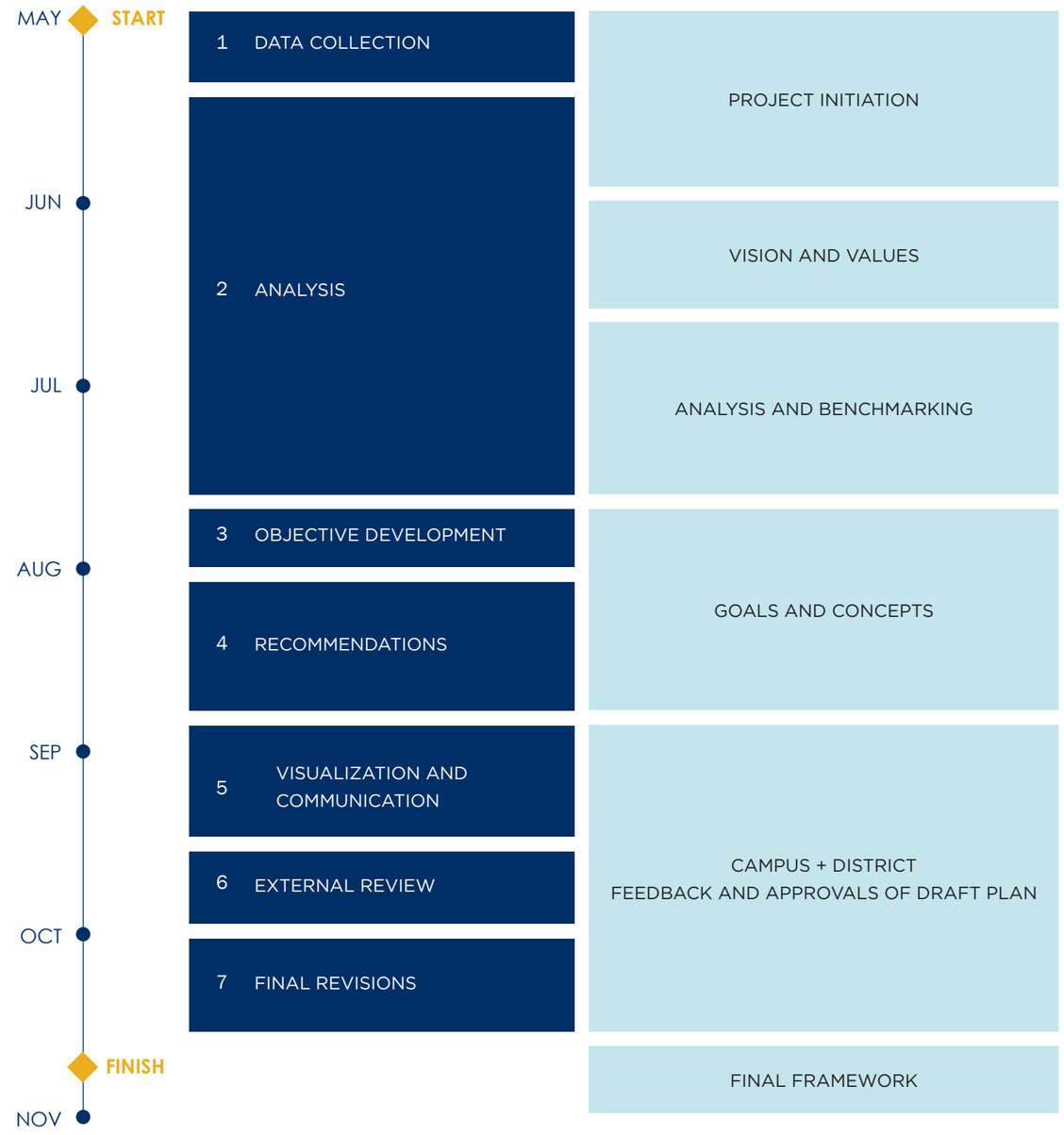
2 **VALUES AND VISION**
Values and vision involved coordinating the engagement of all the voices across the District to inform the Sustainability Framework in workshops and listening sessions with faculty, staff, and students. The VALUES workshop is a collaborative visioning session used to understand which sustainability topics are most important to the campus community. These topics were then explored further in detailed listening sessions with campus experts.

3 **ANALYSIS AND BENCHMARKING**
Analysis and benchmarking evaluated the operational performance of The District's portfolio against similar age building types, identifying deviations from expected performance. Analysis conducted compared the portfolio to new construction expectations, and quantified the impact of areas for improvement toward long term performance goals.

4 **GOALS AND CONCEPTS**
Goals and concepts focused on establishing goals and measurable objectives for each impact area. Draft goals were reviewed with District leadership. Then, the campus community engaged in two days of on-campus workshops to confirm the draft goals and brainstorm objectives. Goals and objectives were finalized to incorporate the priorities and feedback gathered through engagement.

5 **FINAL FRAMEWORK**
Documentation of the Sustainability Framework consisted of the incorporation of the stakeholder feedback into the document presented to guide future campus decision-making.

Project Schedule



Engagement

Cerritos College deeply values the perspectives, experiences, and priorities of its campus community. Collaborative decision-making is essential to developing recommendations that reflect the priorities of the campus community. This Sustainability Framework's impact areas, objectives, and suggested actions were developed collaboratively with the Facilities Planning Committee, students, staff, and faculty through a series of virtual and on-campus engagements. Co-developing plan elements can begin to build shared buy-in, ownership, and momentum as the Framework is implemented. The engagement process included four phases:

1 **VALUES WORKSHOP**
To define the impact areas addressed through the Sustainability Framework.

2 **LISTENING SESSIONS**
To understand what is happening now on campus related to the impact areas.

3 **ON-CAMPUS ENGAGEMENTS**
To initialize draft goals and brainstorm objectives, actions and measures.

4 **RESILIENCE ASSESSMENT**
To establish a data baseline for Cerritos to track progress as sustainability initiatives develop.

VALUES WORKSHOP

PURPOSE: Define the impact areas to be addressed through the sustainability Framework.

What is the workshop?

The VALUES Workshop is a collaborative visioning session to establish sustainability goals. VALUES stands for Viewing Architecture through the lens of User Experience and Sustainability; it is a tool for considering how sustainability decisions relate to the way people experience their environment. The VALUES Framework moves beyond rating systems to consider the ecological, social, and economic aspects of sustainability and arrive at shared priorities that truly reflect the priorities of the campus community.

Image: 12 VALUES topics that helped participants identify most important impact areas for Cerritos. (DLR Group)

What activities were included?

Over the course of a two-hour virtual workshop, attendees participated in the following activities, which were framed by a series of educational topics that impact resource conservation, human health, ecology, community health, and behavior awareness.

Find your voice: participants introduced themselves and discussed the perspectives present and missing from the workshop.

VALUES prioritization: participants reviewed a series of sustainability-related themes and design directions to identify sustainability priorities.

Who attended?

Members of the Facilities Planning Committee including a diverse range of staff and faculty representing the following departments:

- Administration
- Faculty
- Information Technology
- Management
- Student Services
- Procurement + Contracts
- Sustainability Advocate

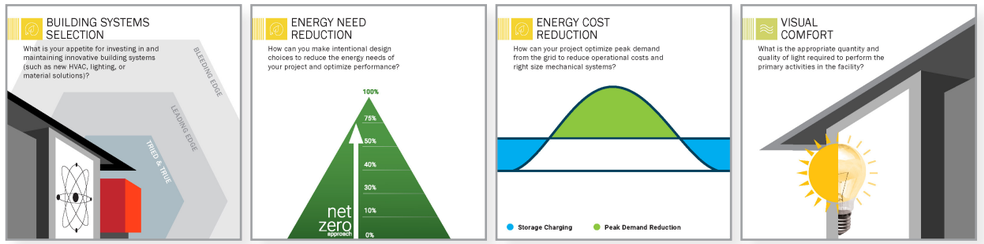
While the Facilities Planning Committee includes student members, those members were unable to attend the VALUES workshop.

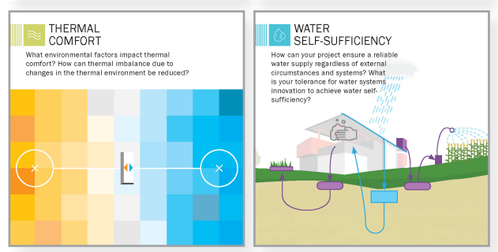
What were the outcomes?

This section reviews the key themes identified through the VALUES exercise. Participants reached a shared consensus around the top six most important areas to address through the Sustainability Framework. These themes are the foundation for the impact areas, goals, and objectives in this Framework.

1 Efficient energy and water use that balances comfort and user convenience

Participants agreed upon the importance of reducing resource use (energy, water, and decarbonization) while still maintaining the comfort and educational experience of the campus. They suggested balancing interventions like energy storage and energy need reduction with improved visual and thermal comfort. Participants discussed the importance of addressing water use.



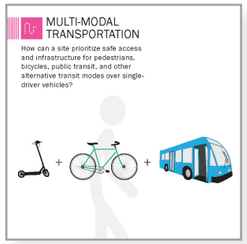


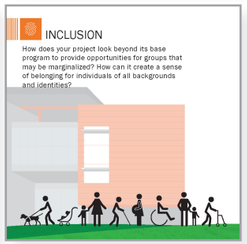
2 Resilient campus – prepared to support campus and community in unexpected situations

Participants agreed that they envision Cerritos supporting both students and the broader community before, during, and after crises. They discussed the need for better disaster preparedness plans in events like earthquakes and floods, and identified the opportunity to become a community resource during disasters and increase community awareness of the supports Cerritos can provide.

3 Walkable, vibrant, connected, and accessible campus

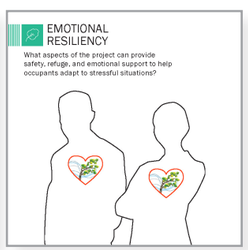
Participants would like more convenient, accessible, and sustainable transportation options to and from campus. They identified the need for improved bike and pedestrian connections to campus, options for students without cars, carpooling incentives for students and staff, and improved public transit options. Across campus, participants would like more accessible pathways and active spaces that promote health and well-being.





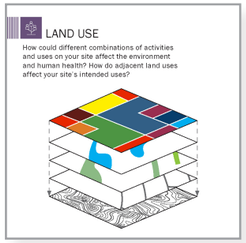
4 Beautiful, restorative outdoor spaces to learn, gather, and stay

Participants identified the need for more shaded outdoor areas on campus with use of native drought-tolerant plants, including outdoor learning areas, native gardens, places to socialize, and places to host large gatherings, events, and partnerships. Restorative outdoor spaces would support emotional resilience and motivate students to stay longer on campus. Participants emphasized the opportunity to re-imagine the quad to create more vibrant outdoor space.



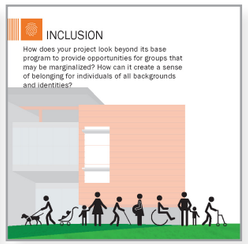
5 Equitable access to student resources – especially for those with limited access

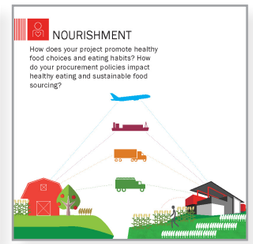
Participants identified the need to expand the resources already provided to students to ensure that those with limited access are supported at Cerritos. Resources discussed include housing, access to healthy food, and access to materials like laptops and office supplies.

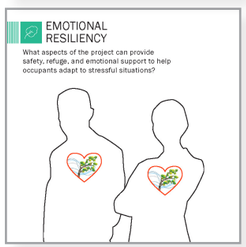


6 Inclusive culture reflected in facilities and policies

Participants identified the need to formalize and strengthen the Cerritos culture of inclusivity. They would like the campus to be a welcoming, safe, and restful area for people of all backgrounds, religions, and physical abilities. There are opportunities to increase gender equity as new facilities are constructed, and to continue hosting awareness activities and events that represent the many diverse groups on campus. Participants also discussed the importance of honoring indigenous relationships, history, and their connection to the land.







LISTENING SESSIONS

PURPOSE: Understand the current state of key sustainability topics.

What are Listening Sessions?

Listening Sessions are structured conversations with the campus community intended to cover a topic deeply and allow an opportunity for key stakeholders to provide focused input. The sessions were conducted with Cerritos College staff and faculty to understand the current state of key sustainability areas: energy, water, waste, resilience, health and well-being, and academics. These topics were a starting point based on existing sustainability commitments and early conversations. Additional conversations were held and topics expanded as needed to address new themes that emerged from the VALUES Workshop.

What activities were included?

For each topic, one-hour virtual meeting covered a standard set of questions, including: what is already working or in progress now? What is not working? Where do you see opportunities for improvement? Workshop participants shared knowledge and experiences related to the topic, with additional follow-up questions posed by facilitators.

Who participated?

Staff members with knowledge or expertise related to a give topic area were invited to the session for that topic area.

LISTENING SESSION	PARTICIPANT(S)
Wellness Focus Listening Session	• Dr. Elizabeth Miller - *Dean* • Hillary Mennella - *Associate Dean* • Elizabeth Rodriguez - *CSEA*
Academics Focus Listening Session	• Tor Lacy - *Faculty* • Audra Graziano - *Faculty*
Water Focus Listening Session	• Dr. Rebecca Robertson - *Interim Manager*
Energy Focus Listening Session	• Anthony Parker - *Director* • Dr. Rebecca Robertson - *Interim Manager*

ON-CAMPUS ENGAGEMENT

PURPOSE: Initialize draft goals with the campus community, and brainstorm actions and measures.

What is On-Campus Engagement?

After initial goals were drafted by the consultant team for each impact area, on-campus engagement was conducted through campus visits and digital outreach to confirm: did we get the initial goals right? What aspects of the goals resonate or need to be further developed? What would success look like? This step was critical to ensuring that the goals, objectives, and suggested actions of the plan truly reflect the priorities of the campus community.

What activities were included?

Feedback was collected through an on-campus booth as well as a digital survey sent to students and staff, which received 242 responses. All students and staff received an email inviting them to participate in both the on-campus engagement and the survey. For in-person engagement, participants were invited to share their ideas by writing them on sticky notes, talking with a DLR Group team member who documented their ideas, or submitting a response to the survey. People were welcome to respond to as few or as many prompts as they were interested in.

First, participants were asked to review the draft goal for each impact area and identify: to what degree does this goal resonate with you? Then, participants were invited to share in more detail: what aspects of this goal resonate with you? What aspects would you change? Is there anything missing?

Feedback was also collected on what success would look like to inform actions and measures for each impact area Participants were asked: if these goals were implemented successfully on campus, what would you report, observe, or measure? This area of feedback generated many potential actions and strategies from the campus community.

Who participated?

Students, staff, faculty, and other campus visitors and community members were invited to give feedback. At least 275 members of the campus community shared their ideas both in-person and through the survey.

Images: On-campus engagement. (Captured by DLR Group)

What were the outcomes?

The feedback from both in-person engagement and the survey is synthesized below into key themes for each impact area. Feedback is summarized across prompts due to the overlap in ideas.

1 Resource Conservation

- **WASTE:** Students, staff, and faculty would like to see more sustainable waste practices around campus, including food waste; recycling for paper, glass, and plastic; and innovative strategies for breaking down plastics waste.
- **PROCUREMENT**: Some students and faculty would like to see purchasing strategies reflect the campus commitment to zero plastics and reduced waste.
- **WATER**: Campus community members would like more hydration stations around campus and access to quality water.
- **COMFORT**: Campus community members would like more comfortable indoor and outdoor environments, including reduced glare and improved temperature control.

2 Resilient Infrastructure

- **EMERGENCY SUPPORT**: Students, staff, and faculty would like to better understand the available resources and support (emergency shelters, lock-down supplies, etc.) that Cerritos college offers during unexpected situations.
- **BASIC NEEDS**: Campus community members would like more basic needs resources that help support food insecure individuals, differently-abled individuals, and low income individuals.
- **COMMUNICATION**: Students would like to know the proper protocol during unexpected situations. Some are currently unaware of how to react to crises.

3 Connected Campus

- **WAYFINDING**: The campus can be confusing and hard to navigate. Signage is small or hard to find, campus maps are confusing and may not match how students experience the campus, and there is limited accessible wayfinding for those with physical disabilities such as those who are hard of hearing or visually impaired.
- **PARKING**: There is limited parking next to the academic core of the campus, and the long walk from other parking is unshaded.
- **WALKABILITY**: Walkers desire more shade along pathways, including from parking to the academic core of campus.
- **ALTERNATIVE MODES**: Campus community members would like more bike infrastructure on and around campus, including bike paths and bike racks. Some would like micro-mobility incentives and initiatives to reduce reliance on cars.
- **SOCIAL CONNECTION**: Students would like more opportunities to connect with each other, including fostering connection for virtual learners and more presence for on-campus clubs.

4 Open Space

- **SHADED SEATING & GATHERING**: Students would like more shaded outdoor seating areas across campus to restore, focus, gather, and socialize.
- **ECOLOGY**: Students would like more access to nature on campus, including trees, flowers, and gardens. This would create a more inviting, beautiful, and restorative environment. Some expressed concern that the artificial turf on campus does not align with sustainability goals, and that current maintenance practices do not always support campus ecology.

5 Campus Resources

- **ASSETS**: Students really appreciate the many resources already offered at Cerritos, including housing, financial aid, and support for students who are parents.
- **COMMUNICATION + AWARENESS**: Communication about resources could be improved; those who know about the campus app love it, but some do not know it exists. Improvements could be made to the website to make it easier to find available resources.
- **COUNSELORS**: It is sometimes challenging to access counselors when students need them, with schedules being booked out or difficulty making appointments.
- **SPACES**: Some desired spaces are missing or could be improved, like the bookstore, places to study, all-hours spaces, and spaces with reliable Wi-Fi.
- **FINANCIAL RESOURCES + SUPPORT**: Students mentioned that certain financial processes — like FAFSA, accessing financial aid, and navigating work-study or on-campus jobs — can be confusing or hard to navigate. They would also like financial support for academic supplies like textbooks.
- **FOOD**: Students desire more access to food options, especially healthy food options, throughout the day — currently, on-campus options may be limited in offerings and hours of service. Sometimes sustainability policies like plastic bans can make it harder more costly for partners to provide students with food assistance — there is potential to align sustainability practices with resource provision.

6 Academics

- **ACADEMIC SUPPORTS**: Students would like more academic supports and resources like tutoring, places to study, career guidance, mentorship, and academic survival skills.
- **SUSTAINABILITY COURSEWORK**: Students and staff would like more courses that incorporate or focus on sustainability, including a sustainability element in all courses, sustainable skills and trades, hands-on learning, and gardens as learning opportunities.

7 Inclusive Environments

- **PARENTS**: Some voiced the need for additional support for students and staff who are parents, including lactation rooms and childcare, while appreciating the support already provided.
- **AGE**: Some members of the campus community would like more inclusive events, resources, and campus culture for students of all age groups, including older students.
- **DIVERSE STAFF**: There is desire for representative and diverse staff, especially for Black students and students with disabilities, who can offer mentorship and support.
- **ACCESSIBILITY**: Some would like an inclusive and accessible campus for people with disabilities, including accessible wayfinding (see CONNECTED CAMPUS).
- **STUDENT VOICE**: Students acknowledge that there are already opportunities to provide feedback and would like to see more student engagement.

RESILIENCE ASSESSMENT: SECOND NATURE'S CAMPUS EVALUATION OF RESILIENCE DIMENSIONS

PURPOSE: Create a baseline measurement of campus resilience.

What is Second Nature's Campus Evaluation of Resilience Dimensions?

The Campus Evaluation of Resilience Dimensions is an interactive worksheet where participants rate their campus through the lens of five dimensions: infrastructure, economics, ecosystem services, social equity & governance, and health & wellness. The goal of this assessment is to create a baseline measurement of campus resilience and develop initial indicators of resilience within an institution.

The results of the evaluation were used to inform the potential objectives and actions found within the impact areas. This evaluation allowed DLR Group to identify areas of improvement that could be addressed through the recommendations found within this Framework.

What activities were in the Evaluation?

The worksheet uses prompted questions where participants rate their campus on a sliding scale from one to five. Each question relates to one of the five dimensions and results in an average score that will serve as the baseline rate that Cerritos College can measure against in future assessments.

Who participated in the Evaluation?

Key administration staff at Cerritos College participated in a resilience focus group where each individual completed Second Nature's Campus Evaluation of Resilience Dimensions.

What were the outcomes?

The average scores of each dimension are outlined below. Detailed findings are presented on the following pages.

LINK TO SECOND NATURE EVALUATION

INFRASTRUCTURE
Average Score:
3.35 / 5

SOCIAL EQUITY AND GOVERNANCE
Average Score:
3.32 / 5

ECONOMICS
Average Score:
3.60 / 5

HEALTH AND WELLNESS
Average Score:
3.45 / 5

ECOSYSTEM SERVICES
Average Score:
3.32 / 5

Each dimension is broken into sub-categories. Scores here represent the average of all sub-category scores. Detailed breakdowns of each sub-category can be found on the following pages.

1 Infrastructure

Average Score:

3.35

Housing and Other Buildings
Cerritos is already moving towards constructing student housing and aims to meet LEED Silver standards for all new construction. LEED Platinum is the ultimate goal for the buildings, however major investments and community support must happen to achieve this goal.

Transportation
Participants expressed concerns regarding transportation accessibility for faculty. Currently, students are provided with free transportation passes for buses and metro, however staff are not provided with the same benefit. Participants explained that hiring new on-campus staff is difficult; transportation to and from campus deters potential hires due to continually rising gas prices.

Mobility
Participants are concerned about pedestrian safety. Cerritos College is adjacent to Studebaker Road and Alondra Boulevard, two major thoroughfares with high-speed traffic. Encampments exist next to the campus and block pedestrian sidewalks and bike routes. While Cerritos can do little to address the surrounding context, the administration recognizes the need for improved multi-modal experience on campus.

Energy
The California Community Colleges Chancellor's Office Climate Action and Sustainability Framework directs Cerritos' energy goals. Participants explained how the campus aims to be self-sufficient by 2035, in accordance with the goals set by the Chancellor's Office. Additionally, the campus strives to increase campus energy redundancy to prevent outages from disrupting academic processes. Participants also mentioned that the Parking Lot 1 and 10 solar project, which is expecting to break ground in 2024, will reduce Cerritos College's dependence on electrical utilities by 83 percent.

Water Supply
Cerritos does not currently track water usage. The primary challenge is lack of employee bandwidth; current administrators are at capacity and need a dedicated team to operate and manage water infrastructure.

Emergency Preparedness
Cerritos administrators are trained for emergency situations; however, this information is not disseminated to the wider Cerritos community. A comprehensive plan to adequately train the entire campus community in emergency preparedness is needed.

2 Economics

Average Score:

3.6

Institutional Finances
Participants explained that Cerritos could invest more in resilience efforts; however, when compared to other community colleges, Cerritos is doing well financially and can comfortably maintain their current campus operations.

Investments in Resilience
Cerritos is focused on sustainability. The college has a dedicated sustainability fund that allows the institution to implement sustainability initiatives like this Framework.

SECTION 1.9

Engagement - Resilience Assessment (Continued)

3 Ecosystem Services

Average Score:

3.32

Natural Areas – Knowledge & Management
There is a disconnect between what can be done on a campus versus what can be done in the larger community. Cerritos College's climate mitigation strategies are limited by their budget.

Campus Property – Land Use and Public Access
While Cerritos is meeting resilience criteria for public access, there is room for improvement in intentional land use. Participants explained that altering the land use is difficult as the current master plan binds them to outdated land use plans.

Waste Management
Cerritos College has won the Green Award at the 2023 Foundation for California Community Colleges/CollegeBuys Purchasing Conference for their sustainable materials purchasing. Cerritos College does not have a recycling program; a student initiative to create a recycling program occurred in 2014 but ended only a few years after the initiative took place.

4 Social Equity and Governance

Average Score:

3.32

Civic Engagement and Participation
The COVID-19 pandemic has caused a decline in participation at Cerritos College events. Participants explained that Cerritos students are mostly commuters coming to campus at various times throughout the week; this makes planning engagement time slots harder since administrators do not know what slots will capture the most amount of students.

Diversity
Cerritos College is predominantly Hispanic. Participants explained that Hispanic celebrations, events and activities are continually being planned, but recognizes that other identities need to be celebrated as well.

Resilience Communication and Awareness
Cerritos requires emergency preparedness training for managers, but the trainings are not required for all Cerritos College community members.

Education and Curriculum
Participants explained that there are currently no incentives in Los Angeles county to provide curriculum for sustainability.

5 Health and Wellness

Average Score:

3.45

Food Systems
Although a variety of food options surround the Cerritos campus, their offerings are not always healthy or affordable. The Falcon's Nest, a college run food pantry, offers students and community members a place to get groceries.

Healthcare and Services – Individual and Collective Well-being
Participants explained that the largest barrier to healthcare access is awareness of resources offered on campus. Many students are not aware of how to access campus-provided healthcare.

Sense of Place
Cerritos College has a clean and inviting campus, but participants identified that there are opportunities to improve community communication about existing campus resources.

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02

SUSTAINABILITY FRAMEWORK

SECTION 2.1

Establishing a Unique Framework

State of California Policy Context

Recommendations in this Framework were closely aligned with two existing sustainability frameworks that already guide Cerritos sustainability efforts: the California Community Colleges Chancellor's Office (CCCCO) Climate Action and Sustainability Goals and AASHE Stars Reporting Tool. These were cross-referenced with the goals, objectives, and actions of this Framework to ensure support of existing commitments. The goals, objectives, and actions outlined in the following pages identify opportunities to position Cerritos as a leader in sustainability for these peer-supported frameworks while honoring the campus community's unique priorities.

SECTION 2.2

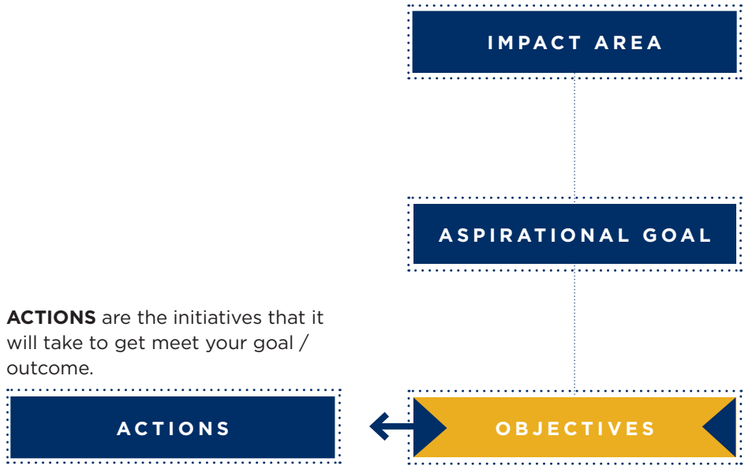
Impact Areas

Through engagement with the Facilities Planning Committee 64 VALUES cards were used to spark conversations around what unique sustainability priorities Cerritos College needs to focus their efforts on. Seven topics were collectively identified as most important to the Cerritos College community in terms of sustainability. These topics are identified as Impact Areas.

IMPACT AREA	GOAL STATEMENT
RESOURCE CONSERVATION	Conserve resources, including energy use, in support of the academic mission.
RESILIENT INFRASTRUCTURE	Support the campus and community through unexpected situations.
CONNECTED CAMPUS	Create an active, connected, and accessible campus.
OPEN SPACE	Create a restorative network of outdoor places to support academic and sustainability goals.
CAMPUS RESOURCES	Expand access to and awareness of campus and community support resources.
ACADEMICS	Educate students, faculty, and staff about sustainability through coursework.
INCLUSIVE ENVIRONMENTS	Foster an inclusive culture reflected in facilities and policies.

Overview of Impact Areas

This document is structured by seven impact areas and organized into a hierarchical series of goals, objectives, and actions as outlined below.



ACTIONS are the initiatives that it will take to get meet your goal / outcome.

IMPACT AREAS are the top priorities addressed through this framework, created collectively by the District.

GOALS establish aspirational thinking that the District and College will work toward. These were established by cross-referencing the CCCCO goals and AASHE Stars framework with Impact Areas.

OBJECTIVES outline measurable actions were established by from District and Campus engagement, CCCCO Goals, and Higher Education best practices.

MEASURES align with to define what success will look like. They suggest ways objectives can be tracked using quantitative and qualitative data to monitor progress throughout the implementation process.

METRICS outline how the objective will be measured based on the data available or data required.

MILESTONES represent the timeline associated with each objective. These outline short-, mid-, and long-term actions.

ESTABLISHED IN SUSTAINABILITY FRAMEWORK

TO BE DEFINED IN CAMPUS MASTER PLAN

State Chancellor's Office and AASHE Stars Alignment

CERRITOS COLLEGE IMPACT AREAS	CCCCO SUSTAINABILITY AND CLIMATE ACTION GOALS	AASHE STARS
RESOURCE CONSERVATION	OPERATIONALLY FOCUSED GOALS *(ENERGY, WATER, WASTE, AND GREENHOUSE GAS EMISSION REDUCTION)*	OPERATIONS *(AIR AND CLIMATE, BUILDINGS, ENERGY, FOOD AND DINING, GROUNDS, PURCHASING, TRANSPORTATION, WASTE, AND WATER)*
RESILIENT INFRASTRUCTURE		
CONNECTED CAMPUS	TRANSPORTATION GOAL	GAP
OPEN SPACE	GAP	
CAMPUS RESOURCES	FOOD SYSTEMS GOAL	ENGAGEMENT *(CAMPUS ENGAGEMENT, AND PUBLIC ENGAGEMENT)*
ACADEMICS	GAP	ACADEMICS *(CURRICULUM)*
INCLUSIVE ENVIRONMENTS		PLANNING AND ADMINISTRATION *(COORDINATION AND PLANNING, DIVERSITY AND AFFORDABILITY, AND WELL-BEING + WORK)*
		INNOVATION AND LEADERSHIP (ALL)

LINK TO AASHE STARS

CERRITOS COLLEGE IMPACT AREAS

SECTION 2.5

The seven Impact Areas noted herein are structured to address “Where we are now” and “Where we are headed” with specific objectives, potential actions, and potential measures identified in each. In this format, the Impact Areas reinforce the intended outcomes set forth by the College, including the unique overlay of Resilience Dimensions.

Resource Conservation

GOAL

CONSERVE RESOURCES, INCLUDING ENERGY-USE, IN SUPPORT OF THE ACADEMIC MISSION

WHERE WE ARE NOW

In alignment with statewide goals adopted by the California Air Resources Board (CARB), California Community Colleges can strive to eliminate Greenhouse Gas (GHG) emissions by 2035. The California Community Colleges Board of Governors Climate Action and Sustainability Framework directs districts to focus on GHG reductions, green buildings, energy, water, waste, purchasing and procurement, transportation and food systems. Cerritos College has an established track record in aligning its sustainability efforts with the Chancellor's Office guidance.

The following sections are organized by the resources stakeholders identified as being top priorities: GHG, Energy, Water, Waste. Future planning efforts and a complete Sustainability and Climate Action Plan established in the future Comprehensive Master Plan can draw on this framework for overarching strategies.

GREENHOUSE GAS INVENTORY

One of the main contributors to climate change is the release of carbon into the atmosphere. Carbon is released by burning fossil fuels to create the energy needed to operate our buildings and vehicles. Cerritos seeks to reduce its environmental impact by becoming less energy-intensive in both new and existing buildings, transitioning its fleet to hybrid and all-electric vehicles when practical, and using renewable sources to offset its remaining energy needs.

Any decarbonization strategy begins by first understanding where carbon emissions are being generated, otherwise known as an inventory, and then prioritizing strategies that reduce emissions from the sources you can directly control. Carbon emissions are organized into Scope 1, 2, and 3 based on their source:

S1 **SCOPE 1**
Includes all direct emissions from sources owned and controlled by the college, such as carbon dioxide released by burning natural gas on site and fuel used to operate the campus fleet of vehicles.

S2 **SCOPE 2**
Includes indirect emissions from consumption of purchased energy utilities, such as electricity, heat, or steam.

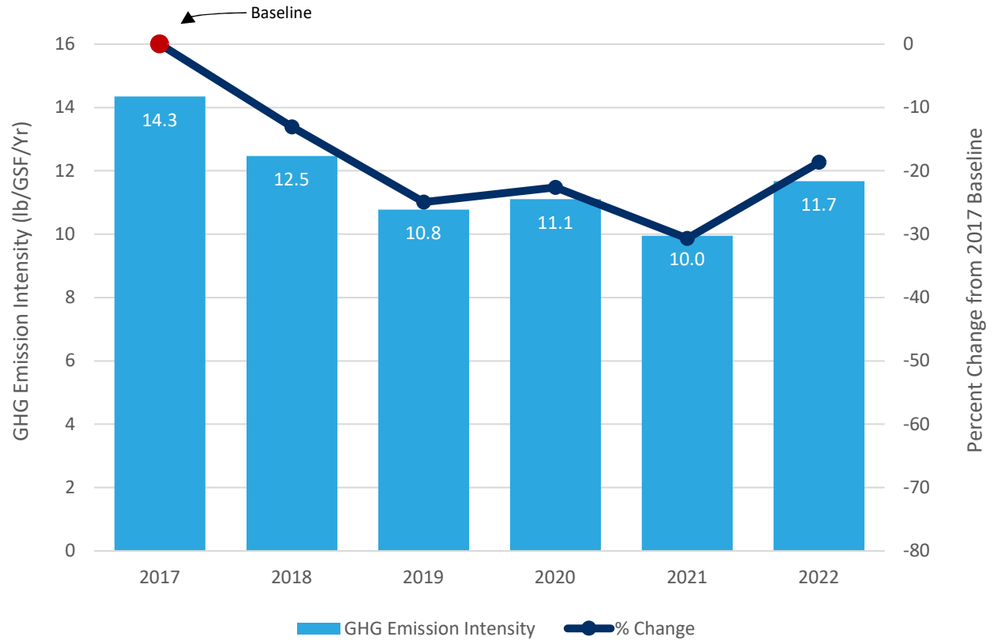
S3 **SCOPE 3**
Includes all indirect emissions not covered by Scopes 1 and 2 and includes emissions from student and staff commuting.

Scope 1 accounts for the largest percentage of greenhouse gas emissions at Cerritos because natural gas is used for powering the campus facilities. Converting existing buildings to all electric may not be financially feasible at this time, which is why on-site solar PV projects are needed to achieve the CCCCO net zero target.

SECTION 2.5.1

Scope 3 emissions were excluded from this Framework but existing programs like free bus passes for students, encouraging staff carpooling, hybrid work, online courses and providing EV charging infrastructure help Cerritos lower Scope 3 emissions. Improving campus connectivity to adjacent bike paths and sidewalks will encourage alternative modes of transportation (please refer to CONNECTED CAMPUS IMPACT AREA for more information). In the future, Cerritos can baseline (set a reference point value to compare future data against) its Scope 3 emissions from staff and student commuting through a transportation survey.

CERRITOS COLLEGE YEARLY GHG EMISSIONS (SCOPE 1 AND 2)



CAMPUS FLEET

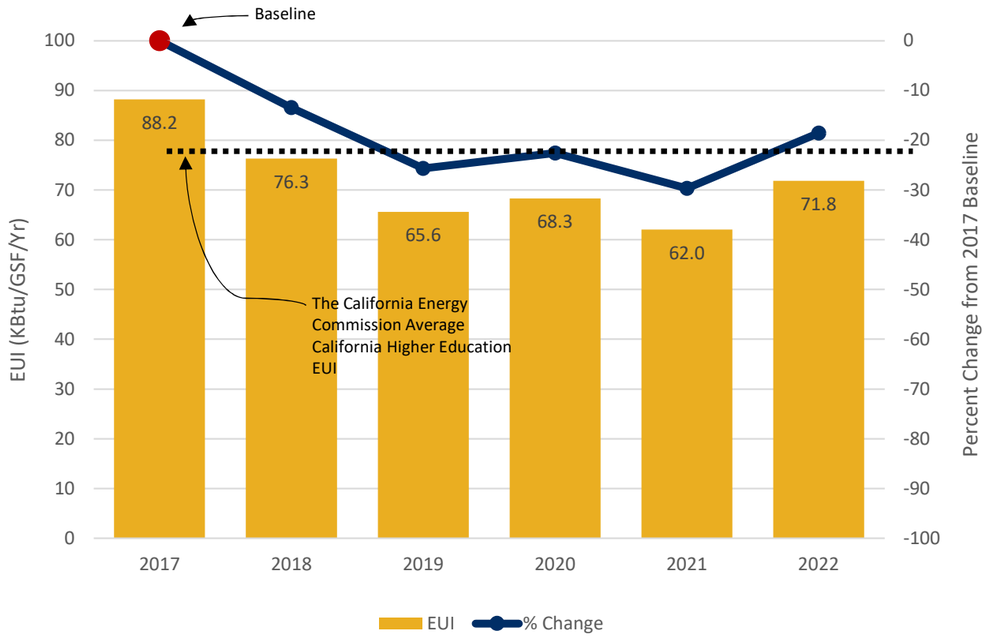
The campus fleet of vehicles includes a mix of traditional combustion engines, all-electric, and hybrid options. All-electric golf carts and bikes are purchased for the maintenance team and campus security, but all-electric replacement options for heavy-duty and medium-duty trucks and vans, as well as the campus police vehicles, are not yet viable or financially feasible. Hybrid options may be a better solution. Alternative fueled vehicles should be considered in vehicle replacement plans. The fuel used to operate the campus fleet was assessed as part of the Scope 1 emissions inventory.

RENEWABLE ENERGY

In 2022, Cerritos College entered into a landmark Power Purchase Agreement (PPA) with Forefront Power. This fully executed PPA will bring a 7,086 kilowatt (kW) solar array to Cerritos in 2025. It is estimated that 83 percent of the campus energy will be offset by this parking lot photovoltaic (PV) canopy project. The PPA model will alleviate most upfront costs associated with the solar project and reduce the District's financial risk. Additional shaded areas provided by the panels will help reduce urban heat island effect on campus and increase user comfort.

While Cerritos has made progress in reducing vehicle-related emissions, there is still opportunity for improvement. Changes in the energy sources of local utilities may help Cerritos prioritize investment towards other sustainable energy infrastructure. Southern California Edison, the electric provider for Cerritos College, is on target to deliver its customers with electricity sourced from 100 percent renewables like solar and wind by 2050. As the energy grid is decarbonized and the carport solar project comes online, Cerritos can focus on strategies like managing peak loads and cataloging every major piece of equipment that uses refrigerants on campus.

CERRITOS COLLEGE YEARLY ENERGY USE



ENERGY EFFICIENCY

Cerritos College undertook a detailed Integrated Energy Master Plan (IEMP) in 2015, funded by Southern California Edison. The IEMP provided a step-by-step process for reducing energy costs without compromising operational function. Implementation of that plan over the last eight years has addressed many energy and cost saving opportunities.
For example, Cerritos College's direct access contract with Constellation Energy minimizes the impact of escalating electricity prices. Meanwhile, the College is following best practices to help save energy by adjusting room temperature set points and using lighting controls and motion sensors to turn off lights in unoccupied rooms. Cerritos is currently balancing the competing priorities of occupant comfort, indoor environmental quality, and energy efficiency. The facilities team has limited employee bandwidth and will require additional training as more modern building systems are added to the Cerritos portfolio. More regular training for students, faculty, and staff on energy saving practices can also help connect occupant behaviors to energy savings.

Cerritos is positioned to be a leader in climate action through its continued work in efficiency and its commitment to producing renewable energy on-site.

ENERGY ANALYSIS

Energy Use Intensity (EUI) refers to the amount of energy used per square foot annually. It's calculated by dividing the total energy consumed by the building in a year by the total gross floor area. Like miles per gallon for cars, EUI is the prime indicator of a building's energy performance. The energy analysis conducted for the Framework looked at GHG emissions from overall campus energy consumption. Then, gross square footage was factored in to generate the EUI. Peer data and previous energy analysis conducted for the 2019 Facilities Master Plan and the IEMP was also considered during the analysis.

Despite energy efficiency projects and the COVID-19 closure, overall campus energy consumption data and energy use intensity indicates that energy usage has steadily increased. Two new buildings, the Health and Wellness Complex and the Performing Arts Center, have been added to the Cerritos portfolio since the 2019 Facilities Master Plan and IEMP were completed. Additionally, the Health Sciences renovation is modernizing classrooms and adding high energy use lab spaces.

Health and wellness concerns must be balanced with energy reduction goals; improved air filtration systems in response to COVID are impacting campus energy use. To reduce COVID-19 transmission as students and staff returned to campus, heating, ventilation, and air conditioning (HVAC) system modifications were introduced in 2021 to provide better air filtration and ventilation in all buildings. Following industry recommendations, the Facilities Department moved to MERV-13 filters in all campus buildings, which trap small particles more effectively than filters with lower MERV ratings. The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) published guidance that upgrading to MERV-13 or higher filters and increasing outside air exchange rates is a worthwhile step in emergency response plans despite the increased energy use that results as equipment works harder to push more air through the system. The increased energy use in 2022 stresses the importance of monitoring building-level energy data more regularly and investing in energy conservation measures, like retro commissioning (fine-tuning existing building systems to meet current operating criteria) and smart controls that integrate HVAC and lighting systems, at both the new and existing buildings.

CALGREEN MANDATORY MEASURES FOR EMBODIED CARBON REDUCTION

California Green Building Standards Code (CALGreen) Part 11, Title 24, to be effective July 1, 2024 statewide, requires commercial building projects over 100,000 square feet and school building projects over 50,000 square feet to comply with one of three pathways:

1 **BUILDING REUSE**
Reuse at least 45 percent of an existing structure and exterior. When reuse is combined with new construction, the total additional area using this pathway is limited to double the area of the existing structure (Section 5.105.2).

2 **PERFORMANCE**
Complete a whole building life-cycle assessment (WBLCA) demonstrating 10 percent lower embodied carbon emission than a baseline project design (Section 5.409.2).

3 **PRESCRIPTIVE**
Document environmental product declarations (EPDs) for listed materials (steel, glass, mineral wool, concrete) that are on average, lower than a specified threshold of global warming potential (Section 5.409.3).

Requiring LEED certification is a great start, but Cerritos can also seek design and construction teams with experience modeling and specifying low carbon building materials like mass timber for new buildings. LEED certification alone may not guarantee that these items are included in Cerritos projects, so it is important to review and update design guidelines. Many California colleges, for example, are already adding requirements for WBLCA modeling to help ensure that budgets for new projects include this service.

Educating contractors on expectations for on-campus construction operations can also help ensure that the community is not negatively impacted by the pollution caused by construction projects. This includes requiring contractors to abide by the Smoke Free Cerritos policy, limiting vehicle idling times, and completing certain construction activities during off-peak hours.

WATER

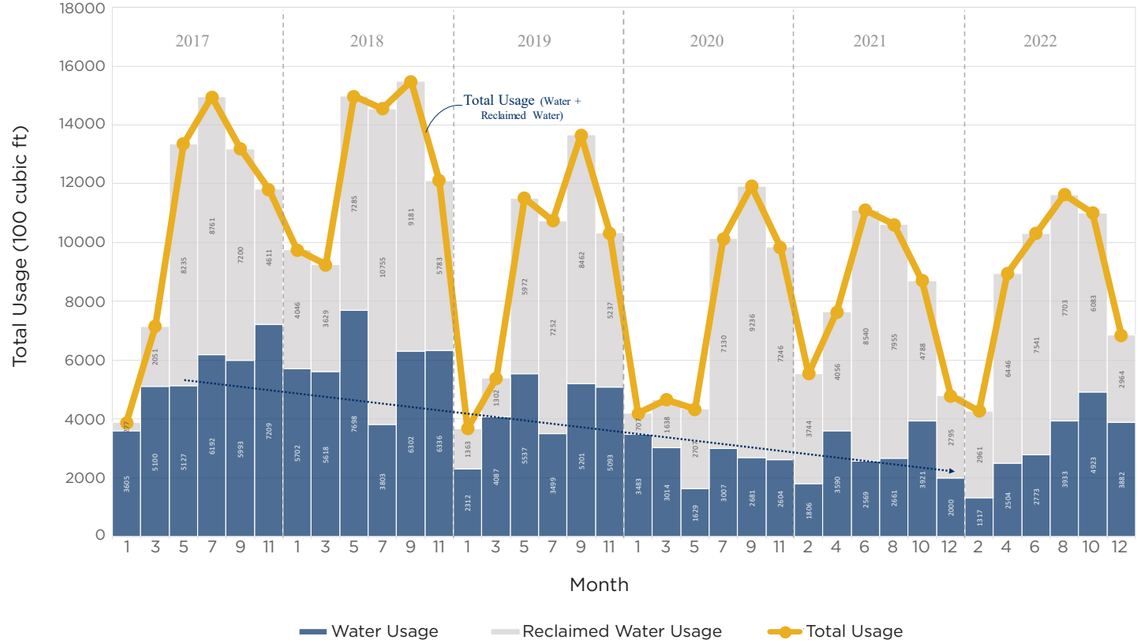
California is experiencing climate shifts that bring more extreme weather, resulting in a massive swing of the driest three years on record moving into some of the wettest weeks in recent history. Despite these storms, CA is still in a drought.

Over 95 percent of the campus landscape and athletic fields are irrigated with reclaimed water purchased from a local municipality provider. By using reclaimed water for landscape irrigation, Cerritos College saves more than 30 million gallons of potable water per year. Additional water reduction projects have included faucet aerators, low-flow shower heads and toilets, and planting of native adaptive landscaping.

Concerns about the reclaimed water irrigation system negatively impacting the health of landscapes need to be investigated further. Water samples from the irrigation system can be collected and tested to help identify the source of previous issues.

Additional irrigation monitoring and metering will help regulate water usage and future new construction projects present an opportunity to explore gray-water and rainwater harvesting strategies.

CERRITOS COLLEGE MONTHLY WATER USE



WATER ANALYSIS

Being a large campus, Cerritos College has high water demand. Landscape irrigation accounts for a major portion of Cerritos's water use; Cerritos has already implemented strategies to reduce water use for irrigation and source non-potable water. In 2016, the College redeveloped the landscaping along Alondra Boulevard and Studebaker Road with drought-resistant and low-water use plants and potable water systems were replaced with the College's reclaimed water irrigation system. As a result, over 95 percent of the campus landscape and athletic fields are irrigated with reclaimed water purchased from a local municipality provider. By using reclaimed water for landscape irrigation, Cerritos College saves more than 30 million gallons of potable water per year.

The transition to irrigating campus landscape with reclaimed water has resulted in concerns about the impacts of reclaimed municipal water on plant health. Testing the municipal water would help validate or rule out these concerns. Cerritos should consider strategies like dedicated irrigation system metering and moisture sensors to detect issues like leaks and to conserve water during and after rain.

Future plans for reinstalling a native garden on the Cerritos campus will include signage and communication strategies to inform campus visitors about native species and how to care for and protect these areas.

To reduce dependency on potable water, Cerritos can look to improvements to their stormwater management system. Passive strategies that increase stormwater infiltration (the process by which water enters the soil and recharges streams, lakes, rivers, and underground aquifers) and improve stormwater management are best evaluated at the campus level when landscape architects, civil engineers, Facilities Department, and other stakeholders can explore the campus as a complete system. These parties should consider areas for detention and bioswales alongside impervious surfaces like parking lots, where water cannot infiltrate. Since parking lots one and ten will be resurfaced as part of the solar project, Cerritos could explore permeable pavement strategies that capture and store precipitation runoff from this area of campus.

Buildings also account for a significant portion of campus water use. Newer buildings on campus are equipped with low flow fixtures as specified in the LEED rating system and through California's Green Building Standards Code. Cerritos should ensure that older buildings are brought up to date by visually inspecting bathrooms and identifying any outdated fixtures that should be replaced. Some higher education campuses dedicate one week per year to this effort by participating in what is commonly called "fix a leak week" and use this as an opportunity to educate students, faculty, and staff about how to detect indoor plumbing leaks at home.

Water Innovation may include graywater systems that capture and treat rainwater from roofs as well as systems that reuse the water from handwashing stations to flush toilets are becoming more common on campuses and may be an option to explore for future new construction projects.

SECTION 2.5.1

Resource Conservation (Continued)

WASTE

Since adopting the CalRecycle Program in 2014, the student led effort to break free from plastic in 2021, the campus community have been actively engaged in reducing the amount of waste sent to the landfill. Waste data was not analyzed as part of this Framework, but stakeholders did voice opinions and concerns related to improving recycling infrastructure and educating students, faculty, and staff about how they can contribute to diverting waste from landfills. Communicating existing campus recycling strategies will help increase awareness about recycling efforts that may go unnoticed by the campus community.

Similar to monitoring energy consumption, the first step in managing waste is to measure the different waste streams generated on campus. By understanding existing waste practices, Cerritos can identify opportunities to target waste reduction for specific waste sources. Some waste haulers and recyclers provide customers with volume data on monthly bills. If this is not currently provided, Cerritos can have a waste audit completed to evaluate the types of waste generated during an average week.

The list below includes types of waste commonly generated on a community college campus:

- Paper, plastics, glass, metals, and other recyclable containers
- Food
- Cooking oil
- Plant materials
- Electronics
- Laboratory equipment
- Office furniture
- Scrap metal
- Pallets

Cerritos College Purchasing Department was recognized for its continued leadership in sustainable purchasing by ODP Business Solutions (formerly Office Depot). Cerritos prioritizes buying products made with recycled content and helps drive the market for innovative recycled content products.

Public events, like the E-waste Collection Event hosted by the STEM club and Women in STEM club, are another great opportunity to help educate Cerritos community members about the importance of keeping waste out of the landfill.

WHERE WE ARE HEADED

1.1 OBJECTIVE | Align goals for energy reduction with the CCCCO Climate Action and Sustainability Framework.

POTENTIAL ACTION

Conduct annual Scope 1 and Scope 2 GHG emissions inventory.

POTENTIAL ACTION

Zero Carbon (Embodied and Operational) strategy for new buildings.

POTENTIAL MEASURE

Reduce greenhouse gas emission to 75 percent below 2017 baseline by 2030.

Resilience Dimension Addressed: **INFRASTRUCTURE** | ENERGY

1.2 OBJECTIVE | Reduce indoor and outdoor water usage.

POTENTIAL ACTION

Create a landscape zoning map and irrigation metering strategy.

POTENTIAL ACTION

Benchmark potable water usage and utilize FMP to identify opportunities to replace outdated water fixtures and toilets.

POTENTIAL MEASURE

Reduction in annual water usage (gallons).

Resilience Dimension Addressed: **INFRASTRUCTURE** | WATER SUPPLY

1.3 OBJECTIVE | Ensure fleet vehicle procurement policy aligns with Cerritos Sustainability Framework and existing procurement policy.

POTENTIAL ACTION

Adopt a district vehicle replacement procedure that prioritizes low emitting and alternative fuel vehicles.

POTENTIAL MEASURE

Replace all outdated campus owned fleet vehicles with alternative fuel vehicles, when feasible.

1.4 OBJECTIVE | Increase awareness about sustainability initiatives and infrastructure projects.

POTENTIAL ACTION

Create a content calendar and utilize existing communication channels (social media, Talon Marks, etc.) to share sustainability content and project updates.

POTENTIAL MEASURE

Contribute at least one sustainability story or project spotlight per month.

1.5 OBJECTIVE | Reduce waste to landfill on campus.

POTENTIAL ACTION

Measure waste streams with a waste audit to establish baseline.

POTENTIAL ACTION

Place recycling bins in certain high use areas.

POTENTIAL ACTION

Prioritize catering companies that offer zero waste event options.

POTENTIAL ACTION

Distribute reusable utensils to students and staff at the start of the semester.

POTENTIAL ACTION

Offer additional recycling services at the end of the semester when faculty are clearing their offices.

POTENTIAL ACTION

Provide incentives or celebrate faculty who are going paperless in their classrooms.

POTENTIAL MEASURE

Reduction of waste produced on campus.

Resilient Infrastructure

GOAL

SUPPORT THE CAMPUS AND COMMUNITY THROUGH UNEXPECTED SITUATIONS

WHERE WE ARE NOW

Climate Change will continue to drive an increase in extreme weather events that will stress Cerritos College's building and emergency response infrastructure.

Cerritos College uses the Rave App which allows students and staff to alert authorities of emergency situations through a one tap system. In emergencies, Cerritos is prepared to respond with an on-campus police station, an emergency shelter, and food and clothes distribution capabilities.

The College identified necessary improvements to communicating availability and offering of resources during emergency situations, such as emergency sheltering or supplies during lock-down scenarios. Current staff explained that only management were required to complete emergency-preparedness training. For successful response to an emergency, all members of the Cerritos College community must be trained in the proper response protocol.

CLIMATE HAZARDS

Extreme Heat

Extreme heat is more than just an inconvenience or a discomfort—it negatively impacts our environment, our infrastructure, and our health. It means a loss of tree canopy, green space, and a degradation of air quality. It means more frequent power failures and transportation issues. It means more medical emergencies and heat related disease or illness. While extreme heat affects everyone, some individuals are particularly vulnerable: the youngest and oldest residents of the community and those with medical illnesses or disabilities are at elevated risk. Also at elevated risk are people in historically underserved and redlined neighborhoods; and those with low incomes or limited English skills. It is critical to keep our community members safe and cool.

Orange County is projected to experience both an increase in average temperatures and more extreme heat events each year. Heat waves can cause risks to health, but the negative consequences of heat on the population can be mitigated with effective measures to prepare individuals and communities. Heat is especially dangerous to those with health challenges, and it puts strain on the natural and built environment, including through energy demands and damage caused by heat expansion in building and road materials.

Building Heat Resilience

Heat resilience means preparing people, buildings, infrastructure, and the public realm to withstand extreme heat events. Firstly, this means ensuring that students, faculty, and staff have the resources they need to stay cool and safe in hot summer months. It also means ensuring that indoor and outdoor spaces help preserve health and comfort in an equitable way.

Extreme Precipitation

Despite increasing drought and water shortages, individual storms and rain events are still becoming more extreme as a result of climate change. The frequency, duration, and intensity of extreme precipitation events is projected to increase over time. Intense rainfall over a short time period can cause flash flooding, especially in areas with improper drainage.

Flooding will cause disruptions to the regular function of the campus and has the potential to cause property damage and affect the integrity of campus buildings. Standing water is also a health hazard as debris and sewage can contaminate the water. It is important to be prepared for high precipitation events to prevent disruptions and damages.

Building Precipitation Resilience

Building precipitation resilience means ensuring that stormwater infrastructure is adequately sized and regularly inspected. Drainage must be cleared of debris and monitored to allow proper flow during high precipitation events.

Wildfires

Cerritos College is in the path of the Santa Ana winds, which makes the campus vulnerable to wildfires. The Santa Ana winds bring high-speed winds that create a very dry environment. This, combined with the increasing temperatures in California, increases the chances of wildfire ignition and spread. While wildfires affect the surrounding population, they especially affect high-risk individuals with medical conditions. Wildfire smoke can drastically degrade air quality which is particularly dangerous for those with health risks.

Building Wildfire Resilience

Building wildfire Resilience means preparing staff and students for evacuations. Additionally, it means preparing buildings, infrastructure, and the public realm for wildfires. Ensuring facilities staff are trained for fire-safety best practices could help lower damages that could occur in the case of a fire.

Drought

Droughts are a recurring climate occurrence and can last for multiple years. California has experienced significant droughts in the past 23 years, which has been recorded as the driest years in the past 1,200 years. Droughts have caused California reservoirs to significantly decline leading to the California government implementing a drought emergency. With dwindling water supply due to droughts, it is more important than ever to ensure that Cerritos is being water-efficient with high efficiency infrastructure and equipment.

Building Drought Resilience

Building drought resilience means education of the Cerritos College community on practical habits to reduce water use. Additionally, ensuring that the Cerritos College campus is water-efficient through high-efficiency systems and plumbing will help to lessen water use impacts.

WHERE WE ARE HEADED

2.1 OBJECTIVE | Reduce disruption to learning and services during unexpected situations.

POTENTIAL ACTION	POTENTIAL MEASURE
Improve ability to transfer to online classes during emergency situations.	Reduction of annual academic disruptions to Cerritos College.

2.2 OBJECTIVE | Increase awareness of proper protocol during emergency situations.

POTENTIAL ACTION	POTENTIAL MEASURE
Require emergency preparedness training for all campus members.	Increased number of completed training across the entire campus community.
Improved communication for emergency procedures during natural disasters and emergency situations.	Increase in communications (drills, emails) and procedural signage (evacuation routes, etc.)

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | RESILIENCE COMMUNICATION

2.3 OBJECTIVE | Innovate campus infrastructure to serve students in sustainable ways.

POTENTIAL ACTION	POTENTIAL MEASURE
Construct and maintain multi-functional infrastructure that can serve as usable space and support sustainability goals.	Infrastructure is not only functional but contributes to reduction of water and energy use.

Resilience Dimension Addressed: **INFRASTRUCTURE** | ENERGY | WATER USE

2.4 OBJECTIVE | Provide a variety of outdoor spaces to support physical, mental, and emotional health.

POTENTIAL ACTION	POTENTIAL MEASURE
Integrate native gardens and foliage across campus, with a variety of sizes, types and abilities to occupy.	Increased diversity in campus fauna and flora.

Resilience Dimension Addressed: **ECOSYSTEM SERVICES** | NATURAL AREAS

2.5 OBJECTIVE | Prepare campus infrastructure and landscapes for increasing temperatures.

POTENTIAL ACTION	POTENTIAL MEASURE
Maximize opportunities for shade on campus to create comfortable outdoor space and to reduce urban heat island effect.	Increased proportion of campus covered by shade.
Coordinate with local public health district to communicate risks and resources in advance of a heat wave.	Increased number of alert communications.
Assess campus energy infrastructure and projected cooling loads as part of energy planning efforts.	Increased number of alert communications.

2.6 OBJECTIVE | Prepare campus infrastructure and landscapes for extreme precipitation events.

POTENTIAL ACTION	POTENTIAL MEASURE
Clean stormwater drains yearly.	Decrease in drain clogs across campus.
Coordinate with local public health district to communicate risks and resources in advance of an extreme precipitation event.	Increased number of alert communications.
Ensure that there are permeable ground surfaces across campus to absorb water and prevent standing water.	Increased proportion of campus with permeable ground surfaces.
Include stormwater best management practices as part of new construction and renovation projects on campus.	Lower runoff calculations in Stormwater Pollution Prevention Plan (SWPPP).

2.7 OBJECTIVE | Prepare campus infrastructure and landscapes for wildfire scenarios.

POTENTIAL ACTION	POTENTIAL MEASURE
Creation and distribution of an evacuation plan in the case of wildfires.	Increase number of evacuation training.
Ensure grounds are clear of dead plant matter, debris, and other flammable materials.	Decrease in flammable materials on campus grounds.

2.8 OBJECTIVE | Prepare campus infrastructure and landscapes for drought scenarios.

POTENTIAL ACTION	POTENTIAL MEASURE
Inspect plumbing and irrigation to ensure any leaks are addressed and systems are working efficiently.	Ensure a yearly inspection of plumbing and irrigation.
Replace water-demanding equipment with high-efficiency/ low-flow equipment.	Reduction of water use by campus equipment.

Connected Campus

GOAL

CREATE AN ACTIVE, CONNECTED, AND ACCESSIBLE CAMPUS

WHERE WE ARE NOW

Cerritos College serves a broad community of students learning in-person and virtually across neighboring cities and out-of-state. The ease of accessing course materials and content, physically or virtually, greatly impacts students' educational experience.

Cerritos College encourages sustainable transportation options for both students and staff through multiple resources and incentives. Students are provided with free public transportation passes; bike racks are available around campus; and multiple electric vehicle charging stations were recently installed.

For students without vehicle access, free public transportation passes are essential to their educational experience. For virtual students, Cerritos College's infrastructure for virtual and hybrid classes enables them to access a transformative, quality education regardless of where they are located.

Participants of the VALUES exercise, listening sessions, and on-campus engagements identified that there is room for improving the multi-modal experience on and around campus. Campus community members would like improved bike and pedestrian connections to campus, additional carpooling incentives, more transit support for staff, and improved public transit connections.

Within the campus, there is a desire for more accessible, shaded pathways and active spaces that promote health and well-being. Many campus community members identified that wayfinding on campus can be improved to be more accessible, visible, and clear. As of September 2023, Cerritos College is close to completing a 3D campus map that will improve the wayfinding experience for campus users.

All students expressed a desire for more opportunities to connect with each other.

WHERE WE ARE HEADED

3.1 OBJECTIVE | Encourage multi-modal transportation to reduce emissions.

POTENTIAL ACTION	POTENTIAL MEASURE
Increase bike, public transit, electric vehicle, and carpooling incentives for students, staff, and visitors.	Decreased vehicle miles traveled.

Resilience Dimension Addressed: **INFRASTRUCTURE** | TRANSPORTATION

SECTION 2.5.3

3.2 OBJECTIVE | Improve on-campus wayfinding, mobility, and accessibility between academic and transportation nodes.

POTENTIAL ACTION	POTENTIAL MEASURE
Engage in a mobility consultant to evaluate existing gaps and identify areas for improvement.	Integrate near, mid and long term improvements to campus circulation and mobility systems.
Create a wayfinding and signage plan as part of the upcoming campus master plan, including accessible signage and wayfinding for those who are deaf, hard of hearing, visually impaired, or face mobility challenges.	Decrease in number of students and visitors asking for directions.
Utilize the Cerritos College mobile app to host a campus map with landmarks, and graphic information on how to access spaces.	

Resilience Dimension Addressed: **HEALTH AND WELLNESS** | SENSE OF PLACE

3.3 OBJECTIVE | Increase on-campus social and virtual connection.

POTENTIAL ACTION	POTENTIAL MEASURE
Investigate opportunities to expand integrated technology across campus.	Increased access to technology use outdoors.
Develop strategies to foster social connection for both on-campus and virtual students.	Increased sense of belonging for both virtual and on-campus students.

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | CIVIC ENGAGEMENT & PARTICIPATION

Open Space

GOAL

CREATE A RESTORATIVE NETWORK OF OUTDOOR PLACES TO SUPPORT ACADEMIC AND SUSTAINABILITY GOALS

WHERE WE ARE NOW

The Cerritos College campus is comprised of more than 40 buildings situated on 135 acres. The campus features drought-resistant plants within the campus grounds and along the exterior campus along Alondra and Studebaker. By switching the campus landscape to drought-resistant plants with reclaimed water for irrigation, Cerritos College saves over 30 million gallons of potable water per year while maintaining the grounds.

Image: Rain garden located on the north side of the Multi-Purpose Building. (Captured by DLR Group)

Cerritos College is engaged with stakeholders in dialogue that employs a deeper understanding of native spaces. Cerritos aims to balance California's natural state with implementing practices that are maintainable for the campus. Current landscaping installation and maintenance practices rely on pesticides, fuels, oils, herbicides, and intense labor for upkeep. As demonstrated by the rain garden seen in the image to the right, Cerritos is moving away from these practices and introducing beautiful landscaping that requires less intervention for upkeep.

With the passed General Obligation Bond measure, the campus will undergo various renovations. Included in these renovations is the creation of a new student services/administration building that will serve as the campus "front door" to welcome students, staff, and community members to Cerritos College. The quad will also undergo renovation to help improve the quality of the campus square.

Through on-campus student engagement, students expressed desire for additional shaded outdoor seating and gathering spaces to study and socialize. In order to achieve this, students need high quality wireless access outdoors.

With climate change increasing, California's already hot temperatures continue to rise, which makes shaded spaces more important than ever. Providing a pleasant outdoor environment with shade, trees, flowers, and gardens would create a more inviting and restorative environment for the entire Cerritos College community. Additionally, students desire a more diverse landscape consisting of native and drought-resistant plants to reduce water use within the College.

Underutilized outdoor spaces can feel desolate and hot. In addition to shade, activation of open spaces is needed through programming and events. Having regular programming and events will attract students and staff into open spaces and enliven the campus.

WHERE WE ARE HEADED

4.1 OBJECTIVE | Enhance outdoor learning environments.

POTENTIAL ACTION	POTENTIAL MEASURE
Construct flexible outdoor spaces to support expanded academic, cultural and community programming.	Increased number and variety of outdoor seating options.

4.2 OBJECTIVE | Support outdoor programming, events, and partnerships on campus.

POTENTIAL ACTION	POTENTIAL MEASURE
Provide a variety of shaded outdoor learning environments and shade trees across the campus.	Increased percentage of campus covered by shade.

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | CIVIC ENGAGEMENT & PARTICIPATION

4.3 OBJECTIVE | Innovate campus infrastructure to serve students in sustainable ways.

POTENTIAL ACTION	POTENTIAL MEASURE
Insert multi-functional infrastructure that can serve as usable space and support sustainability goals.	Invest in a minimum of two outdoor amenities per school year

Resilience Dimension Addressed: **INFRASTRUCTURE** | ENERGY | WATER USE

4.4 OBJECTIVE | Provide a variety of outdoor spaces to support physical, mental, and emotional health.

POTENTIAL ACTION	POTENTIAL MEASURE
Integrate native gardens and foliage across campus, with a variety of garden sizes and plant species. Gardens must be accessible for individuals with mobility challenges.	Increased diversity in native flora.

Resilience Dimension Addressed: **ECOSYSTEM SERVICES** | NATURAL AREAS

Campus Resources

GOAL

EXPAND ACCESS TO AND AWARENESS OF CAMPUS AND COMMUNITY SUPPORT RESOURCES

WHERE WE ARE NOW

Based on a recent survey of the College, about 40 percent of students face food insecurity and about 20 percent face housing insecurity. Cerritos College provides a multitude of resources to support students' basic needs, including food, housing, clothing, and supplies among other services.

FOOD SERVICES AND OTHER BASIC NEEDS

Food support is available to both students and the broader community. The Falcon's Nest, a free on-campus food pantry, provides all students with access to healthy food options and a professional clothes closet. Those who qualify can also receive gas assistance and emergency funds among other resources. Community members can access the Falcon's Nest once to twice per week. Partnerships with Trader Joe's and LA Food Bank have expanded healthy food access for both students and the broader community; once a month, the College hosts a large food distribution event with LA Food Bank that serves about 500 households.

Students and Staff identified that there are limited healthy and affordable food options around campus. While the Falcon's Nest offers great food support, there is an opportunity to improve access to healthy, affordable options at all hours of the day. In addition, students mentioned that certain financial supports - like FAFSA and work-study, can be confusing or hard to navigate. Students would also like financial support for academic supplies like textbooks.

HOUSING SUPPORT

Cerritos offers housing support to students, focusing on those experiencing acute housing insecurity. The Village, California's first community college housing development exclusively for students experiencing homelessness, offers housing to 30 students at a time. Prevention services and rental subsidies are also available for those experiencing housing insecurity.

There is opportunity to expand housing support beyond those experiencing acute housing insecurity. An additional planned student housing development will deliver 396 beds in the next three to four years.

MENTAL AND PHYSICAL WELLNESS INITIATIVES

There are many mental and physical wellness resources available on campus, including licensed social workers who can provide therapy. For students experiencing challenging situations at home, the campus is a safe environment essential to their mental well-being. Many additional wellness initiatives like athletic classes, therapy dogs during high-stress times, an online meditation class, yoga, and HIV testing empower students to take charge of their mental and physical well-being. Wellness resources for staff include a professional development day that offers a wellness track, financial resources, meal planning, walking breaks, and meditations among other things. It is sometimes challenging for students to access counselors or make appointments when needed.

COMMUNICATION AND AWARENESS OF RESOURCES

In addition to providing resources, it is important that students are aware of what's available. The Campus App allows students to search for available resources. Additionally, a new Student Services building is planned on campus to centralize student support resources in a single location.

Students are deeply appreciative of the many resources available to them, however communication about resources available could be improved; some students are not aware of existing resources or tools like the Campus App that provide information about resources offered.

WHERE WE ARE HEADED

5.1 OBJECTIVE | FOOD: Expand access to affordable and healthy food on and around campus

POTENTIAL ACTION

Investigate options for on-campus food service, such as a third party vendor, or adjacent off-campus dining.

POTENTIAL MEASURE

Survey the campus community on desired options, determined preferred option.

POTENTIAL ACTION

Explore opportunities to raise awareness of and expand the Falcon's Nest food pantry.

Resilience Dimension Addressed: **HEALTH AND WELLNESS** | FOOD SYSTEMS

5.2 OBJECTIVE | HEALTH CARE: Increase awareness and use of mental and physical health and wellness resources on campus

POTENTIAL ACTION

Consider opportunities to increase visibility of signage and branding, improved accessibility.

POTENTIAL MEASURE

Number of students accessing mental health services on campus.

POTENTIAL MEASURE

Reduction in wait time for counseling appointments.

Resilience Dimension Addressed: **HEALTH AND WELLNESS** | HEALTH CARE AND SERVICES

5.3 OBJECTIVE | HOUSING: Increase affordable housing options for students.

POTENTIAL ACTION

Provide opportunities to expand on campus student housing and establish additional off-campus housing support services.

POTENTIAL MEASURE

Track student utilization of these services and the efficacy of meeting the projected housing demand.

Resilience Dimension Addressed: **INFRASTRUCTURE** | HOUSING AND OTHER BUILDINGS

5.4 OBJECTIVE | FINANCIAL SUPPORT: Expand student resources for financial aid, employment, career counseling, and supplies.

POTENTIAL ACTION

Create awareness campaign regarding career/resume, financial aid, and supply resources across campus.

POTENTIAL MEASURE

Number of students accessing resources, number of students who find employment in their field upon graduating.

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | RESILIENCE COMMUNICATION

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Academics

GOAL

EDUCATE STUDENTS, FACULTY, AND STAFF ABOUT SUSTAINABILITY THROUGH COURSEWORK

WHERE WE ARE NOW

Associated Students of Cerritos College adopted a sustainability policy in 2014 with the goals of developing students into global citizens through the knowledge, skills and values of sustainability concepts. The execution of this policy has evolved over time as evidenced by the wide range of topics featured in annual Earth Day programing.

Several of the learning and career pathways have incorporated sustainability and green building concepts into curriculum but it can be difficult for young people to be aware of the opportunities for a career in sustainability. A non-discipline specific certificate would be an exciting opportunity to explore in the future.

Sustainability can be reinforced through academics. Through the engagement process, stakeholders agreed that any significant changes to academic programs would be addressed in other planning processes.

WHERE WE ARE HEADED

6.1 OBJECTIVE | Increase visibility of existing academic courses on or related to sustainability.

POTENTIAL ACTION	POTENTIAL MEASURE
With support from Faculty Senate, review and share inventory of current academic courses on or related to sustainability.	Increase the percentage of courses offered by 30 percent by 2025.

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | EDUCATION & CURRICULUM

6.2 OBJECTIVE | Increase the percentage of students who take courses that include sustainability topics.

POTENTIAL ACTION	POTENTIAL MEASURE
Encourage faculty to incorporate sustainability into their course curriculum .	Increased number of courses containing sustainability topics.

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | EDUCATION & CURRICULUM

6.3 OBJECTIVE | Incorporate sustainability at new student and staff orientation.

POTENTIAL ACTION	POTENTIAL MEASURE
Develop a free online course specific to sustainability at Cerritos, partner with local agencies to develop curriculum.	Number of views of course.

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | EDUCATION & CURRICULUM

Inclusive Environments

GOAL

FOSTER AN INCLUSIVE CULTURE REFLECTED IN FACILITIES AND POLICIES.

WHERE WE ARE NOW

The college is currently creating a temporary space for prayer and meditation, but ongoing efforts are being made to address the evolving needs of a growing and increasingly diverse student population.

Cerritos currently provides 15 single-use gender neutral restrooms, and two lactation/wellness rooms. California campus standards require all single-use publicly zone restrooms to be gender neutral and Cerritos currently meets this requirement.

Students may not know how to access non-academic and informal space types: i.e. quiet space for prayer/meditation, locker rooms for non-student athletes, private bathrooms, etc. A continued effort to improve wayfinding and communications about the availability of these spaces will help ensure more students can take advantage of these facilities being on campus.

WHERE WE ARE HEADED

7.1 OBJECTIVE | Provide indoor and outdoor inclusive spaces that promote interaction and wellness.

POTENTIAL ACTION

Expand access to sought after non-academic and informal space types.

POTENTIAL ACTION

Utilize the Cerritos College mobile app to communicate where and when spaces are available and how to access them.

POTENTIAL MEASURE

Analyze utilization and user experience data from Cerritos mobile app.

Resilience Dimension Addressed: **SOCIAL EQUITY AND GOVERNANCE** | CIVIC ENGAGEMENT & PARTICIPATION

7.2 OBJECTIVE | Align with the Cerritos College statement of equitable policies.

POTENTIAL ACTION

Update campus design standards to recognize Universal Design and apply equally to both existing and new buildings.

POTENTIAL MEASURE

Adhere to seven impact areas and embed implementation within the Campus Master Plan.

Resilience Dimension Addressed: **HEALTH AND WELLNESS** | SENSE OF PLACE

7.3 OBJECTIVE | Honor indigenous peoples and their sovereign lands, languages, ancestors, and future generations.

POTENTIAL ACTION

Integrate indigenous arts, curriculum, partnerships, and cultural programming throughout the year.

POTENTIAL MEASURE

Increase programming and curriculum in academic plan(s).

7.4 OBJECTIVE | Strengthen sentiments of campus as a safe space for vulnerable student groups.

POTENTIAL ACTION

Distribute an annual assessment of diversity, equity and inclusion.

POTENTIAL MEASURE

Achieve STARS Campus Pride Index or similar.

03

MOVING FORWARD

Next Steps

The College is committed to implementing this framework. This will be achieved through a variety of opportunities to engage with the campus, strategic alignment of near and long-term campus improvements, policies and actions reinforcing the identified initiatives and specific impact areas identified herein.

The rate and degree of implementation will depend on the resources available to Cerritos College through financial support, policy alignment, staffing, etc. The objectives and actions will guide measures of success and accomplishment in the future, and the College should consider strategies to implement campus improvements that help achieve the goals outlined. Additionally, with a lack of available funding, Cerritos College should consider grants and partnerships to aid in funding the initiatives within this framework.

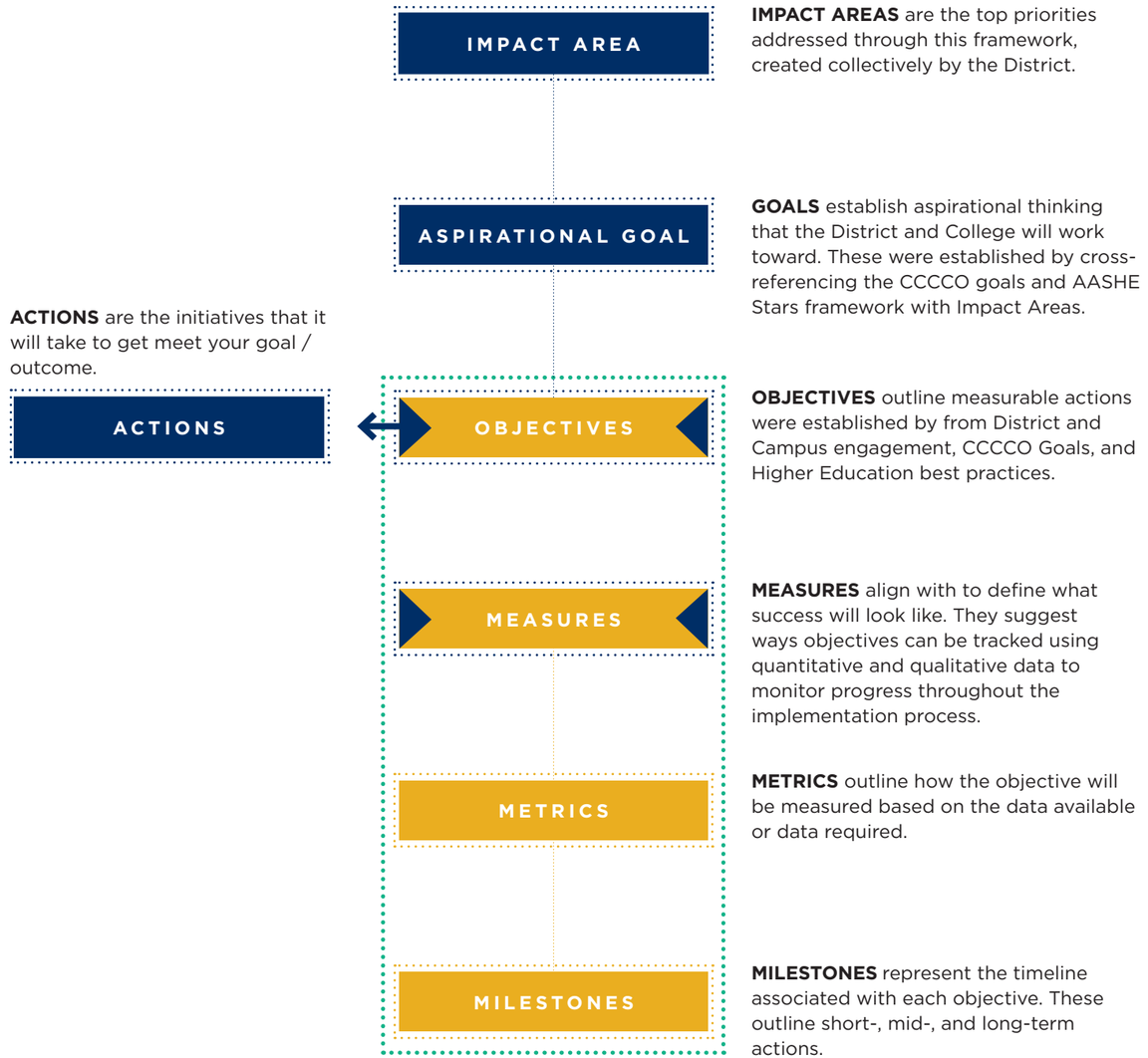
This framework is not the conclusion. An anticipated comprehensive master planning effort will be key to continuing campus conversations, reinforce advocacy across each impact area, and identify champions within the College to carry forward these commitments over the next ten years. This Sustainability Framework serves as a guiding outline for the Facilities Master Plan and Information Technology Master Plan.

The Comprehensive Master Plan process will look holistically at the future of the campus academic and built environment. As part of the master planning analysis and goal setting, the potential actions and measures outlines in this plan will be confirmed with the campus community and integrated into the overall master plan implementation planning. The planning effort will also establish milestones for implementing each sustainability action.

The integrated master plan process will allow for the standalone sustainability projects to be prioritized alongside all capital projects and for sustainable policies and practices to influence design and construction of all campus capital projects.

Image: Cerritos Community Members. (Cerritos College Website)

Next Steps (Continued)



IMPACT AREAS are the top priorities addressed through this framework, created collectively by the District.

GOALS establish aspirational thinking that the District and College will work toward. These were established by cross-referencing the CCCCO goals and AASHE Stars framework with Impact Areas.

ACTIONS are the initiatives that it will take to get meet your goal / outcome.

OBJECTIVES outline measurable actions were established by from District and Campus engagement, CCCCO Goals, and Higher Education best practices.

MEASURES align with to define what success will look like. They suggest ways objectives can be tracked using quantitative and qualitative data to monitor progress throughout the implementation process.

METRICS outline how the objective will be measured based on the data available or data required.

MILESTONES represent the timeline associated with each objective. These outline short-, mid-, and long-term actions.

04

APPENDIX

Acknowledgments

Cerritos College Facilities Planning Committee

- Felipe Lopez, *Executive Vice President*
- Anthony Parker, *Director*
- Mark Logan, *Manager*
- Dr. Elizabeth Miller, *Dean*
- Javier Banuelos, *Manager*
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- Tor Lacy, *Faculty*
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- Theresa O'Neil, *Planning Leader*
- Grace Corsi, *Engagement Leader*
- Patti Mason, *Integrated Energy Planner*
- Cody-Michael Gan, *Campus Planner*

Glossary

AASHE - the Association for the Advancement of Sustainability in Higher Education.

AASHE STARS - the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment, and Rating System (STARS) is a tool for evaluation of campus-wide sustainability efforts. The system recognizes achievements in five categories – Academics, Engagement, Operations, Planning and Administration, and Innovation and Leadership.

Alternative Fueled Vehicles - vehicles powered by an engine that does not solely run on petroleum, such as electric, hybrid, and hydrogen fuel cell engines.

Baseline - setting a reference point measurement or value to compare future data against to track progress.

Carbon Emissions - carbon dioxide emissions or CO2 emission are emissions stemming from the burning of fossil fuels which includes the consumption of solid, liquid, and gas fuels.

Climate Change - change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Climate Justice - a form of environmental justice, climate justice is the fair treatment of all people and the freedom from discrimination in the creation of policies and projects that address climate change as well as the systems that create climate change and perpetuate discrimination.

Carbon Neutrality - or having a net zero carbon footprint, refers to achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset, or buying enough carbon credits to make up the difference.

Decarbonization - reducing or eliminating the use of fossil fuels in buildings by using renewable energy sources such as solar, wind, and geothermal power.

Direct Access Contract - a retail electric service option whereby customers may purchase electricity from a competitive non-utility entity called an Energy Service Provider

Electrification - replacing fossil fuel-based heating systems with electric heating systems.

Embodied Carbon - the carbon footprint of a building or infrastructure project before, during, and after its construction.

Energy Conservation Measures (ECMs) - upgrades, retrofits, repairs and replacements that businesses can implement to become more energy efficient. These measures can significantly reduce operating costs while providing operational benefits by allowing businesses to replace old, outdated equipment.

Energy Use Intensity (EUI) - the amount of energy used per square foot annually.

EV Charging Stations - an electric vehicle charging station, also called EV charging station, electric recharging point, charging point, charge point and EVSE (electric vehicle supply equipment), is an element in an infrastructure that supplies electric energy for the recharging of electric vehicles, such as plug-in electric vehicles, including electric cars, neighborhood electric vehicles and plug-in hybrids.

Greenhouse Gas (GHG) Emissions - any gas that contributes to the trapping of the sun's warmth in the atmosphere.

Glossary (Continued)

Integrated Energy Master Plan - a comprehensive strategic plan that models current campus energy consumption and establishes Energy Use Intensity (EUI) metrics for setting building-by-building energy goals compared to external benchmarks. It is intended to achieve the energy goals of the College through the implementation of a wide range of energy related projects and methodologies, in alignment with the educational and facilities master plans and in support of the continued progression of the campus building and modernization program. The plan embodies a holistic approach to energy planning by recognizing the importance of coordinating short-term and medium-term energy cost savings with longer-term needs.

Leadership in Energy & Environmental Design (LEED) - a green building certification program that recognizes best-in-class building strategies and practices. LEED is a program of the U.S. Green Building Council (USGBC).

Non-Potable Water - water that is not of drinking quality but, depending on its quality, can be used for many other purposes.

Photovoltaics (PV) - the conversion of light into electricity using semiconducting materials that exhibit what is called the photovoltaic effect. Photovoltaic technology helps to mitigate climate change because it emits much less carbon dioxide than fossil fuels. Solar PV has specific advantages as an energy source: once installed, its operation generates no pollution and no greenhouse gas emissions.

Potable Water - water of a quality suitable for drinking, cooking and personal bathing.

Power Purchase Agreement - deal between an energy producer and a customer who needs electricity.

Renewable Energy – energy from sources that regenerate rapidly such as solar, wind, and hydroelectric.

Resiliency - the ability of a system or community to survive disruption and to anticipate, adapt, and flourish in

Scope 01 Emissions - emissions from sources that an organization owns or controls directly – for example from burning fuel in our fleet of vehicles (if they're not electrically-powered).

Scope 02 Emissions - emissions that a company or institution causes indirectly when the energy it purchases and uses is produced. For example, for electric fleet vehicles, the emissions from the generation of the electricity that powers them would fall into this category.

Scope 03 Emissions - encompasses emissions that are not produced by the company itself, and not the result of activities from assets owned or controlled by them, but by those that it's indirectly responsible for, up and down its value chain.

Second Nature Campus Evaluation of Resilience Dimensions - a checklist to help institutions of higher education assess the five dimensions of resilience, and complete the Resilience Assessment as part of the Climate or Resilience Commitment. The tool can be used to survey campus and community members regarding their understanding of strengths and vulnerabilities in the area.

LINK TO SECOND NATURE EVALUATION

Social Equity - just and fair inclusion into a society in which all can participate, prosper, and reach their full potential.

Socio-Economic Status (SES) - an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation.

Glossary (Continued)

Stormwater Pollution Prevention Plan (SWPPP) – a site-specific, written document that identifies potential sources of stormwater pollution at the construction site. It describes practices to reduce pollutants in stormwater discharge from the construction site. Reduction of pollutants in stormwater discharge from the construction site. Reduction of pollutants is often achieved by controlling the volume of stormwater runoff. The plan also identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit.

Triple Bottom Line Sustainability - the holistic definition of sustainability that moves beyond a singular association with the environment and is founded on balancing three main aspects: Environmental, Social, and Economic.

Urban Heat Island Effect - areas where cities are hotter than the countryside due to human-made structures and activities.

Viewing Architecture through the Lens of User Experience and Sustainability (VALUES) - a framework developed by DLR Group to expand the conversation of sustainability and connect to User Experience.

Wellness - wellness comprises of eight mutually co--dependence dimensions: emotional, spiritual, intellectual, physical, occupational, financial, environmental and social. In the context of wellness within the Sustainability and Climate Action Plan, how does changing climate impact the dimensions of wellness.

Whole Building Life Cycle Analysis - studies the totality of products present in a building, providing valuable information for decision-making related to the design, construction, operation, maintenance, and eventual demolition or reuse of a building.

Zero Carbon - when no carbon emissions are being produced from a product or service. A zero-carbon building is a building in which all annual energy consumption is provided by renewable energy generated by the site without consuming coal, oil, electricity and other energy sources. Zero carbon buildings are critical to achieving net-zero emissions by 2050, as buildings represent 39% of global greenhouse gas emissions.

CERRITOS
COLLEGE