Santa Barbara City College

DISTRICT SUSTAINABILITY PLAN

October 2018

SBCC SUSTAINABILITY

Prepared By:
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LETTER FROM THE PRESIDENT

In 2014, Santa Barbara City College issued its first District Sustainability Plan. This document set forth a vision for a sustainable campus, which would also function as a living laboratory, linking environmentally responsible practices to the curriculum.

I'm truly proud to share this updated Plan for 2018. Developed by the SBCC Sustainability Workgroup, comprised of faculty, staff, and students, it describes our accomplishments so far, as well as our goals for the future and our ongoing commitment to implement sustainability projects throughout the district.

Our accomplishments these past four years have been wide-ranging. The new West Campus Center was awarded LEED Platinum Certification in 2017, and in 2018 we were honored with the Best Practice Award for Sustainable Transportation from the California Higher Education Sustainability Conference. The development and establishment of our own permaculture gardens on West Campus, which combine natural landscaping with edible gardens, was one of only four programs in the state honored with the prestigious Exemplary Program Award for 2018-2019 from the Academic Senate for California Community Colleges. Our efforts at waste reduction, energy efficiency, and outreach have also achieved notable results.

Not content to rest on our laurels, we have set ambitious new objectives to achieve our Zero Waste goal between now and 2025. Sustainability is an ongoing process that will lead us to a campus community that sustains a high quality of life, an excellent education, and an inclusive, supportive culture where students feel empowered to change the world.

Our environment, the ecosystem, climate change, transportation issues, and water usage are the topics of our time. These affect 100% of our students and 100% of us! I invite you to review this Plan and join with us in working
toward its goals.

Together forward,

Anthony E. Beebe, PhD, EdD
Superintendent/President
Santa Barbara City College

Dr. Anthony E. Beebe and Professor Adam Green, Director of the Center for Sustainability, working on the installation of main campus' permaculture garden.

EXECUTIVE SUMMARY

The 2014 District Sustainability Plan was developed through stakeholder engagement workshops and evaluation of campus performance data. Since the Plan's implementation in 2014, goals have been achieved throughout the District and verified through measurable and benchmarked performance data.

During our celebration of Earth Day 2018, SBCC stakeholders held a re-envisioning workshop allowing for interactive discussion and review of District improvements, benchmarks implemented, and goals achieved to date. As a collaborative team, stakeholders worked together to revise goals and identify new targets for our 2018 District Sustainability Plan, a vision that will guide us through the next 3 years of sustainability efficiency and campus resiliency.

CURRENT CAMPUS BENCHMARKS AND NEW 3-YEAR GOALS

Transportation

BENCHMARK
- 13% SOV Reduction since 2014

NEW GOAL
- Reduce Single Occupied Vehicles(SOV) commutes to campus by 25% by 2021

Waste

BENCHMARK
- 51% Diversion Rate per 2017 Waste Audit

NEW GOAL
- Divert 75% of Campus Waste from Landfill
- Reduce Overall Waste Generated by 10% by 2021

Water

BENCHMARK
- 23% Campus Water Reduction since 2014
- 98% Reclaimed Water Use for Irrigation

NEW GOAL
- Reduce Potable Water Use by 30% by 2021

Energy

BENCHMARK
- 200 kWh PV System
- 1 LEED Platinum Building
- 1 Building Metered

NEW GOAL
- Expand Renewable Energy Portfolio to 60% by 2021
- Install 1 Gas, Electric, and Water Meter on all Buildings over 5,000 SF by 2021
- LEED Silver Certification for all New Buildings/ Renovations and Surpass Title 24 by 15%

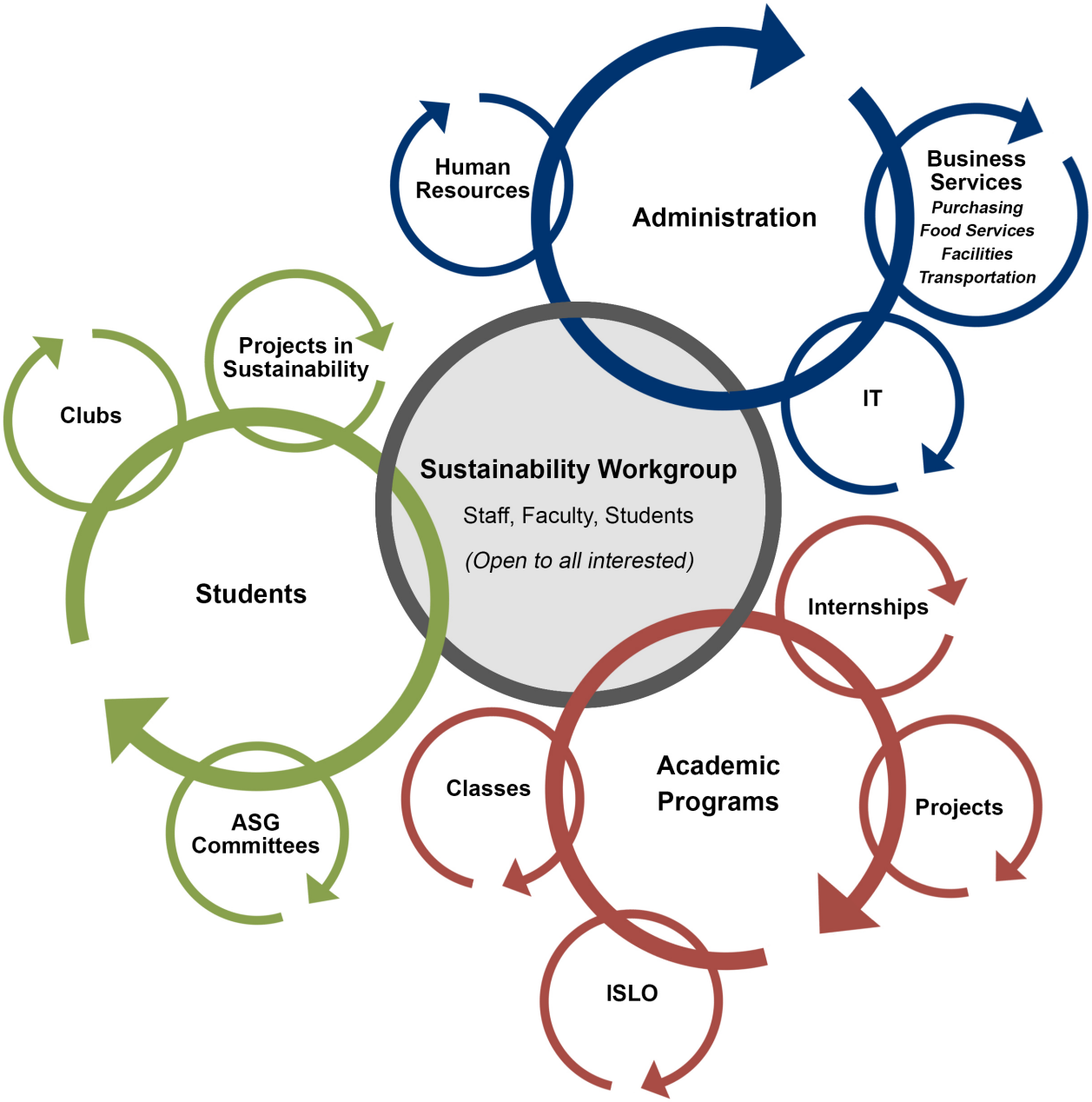
Food

BENCHMARK
- 17% Vegan
- 24% Vegetarian
- 59% Meat

NEW GOAL
- Purchase 30% Local Ingredients (within 100 miles)
- Purchase 20% USGD Certified Ingredients
- Increase Vegan Options to 25% by 2021

SUSTAINABILITY ORGANIZATIONAL CHART

In November of 2017, the Santa Barbara City College Vice President of Business Services implemented the SBCC Sustainability Workgroup comprised of campus stakeholders (Faculty, Staff, and Students) whom assist with campus sustainability related projects. The Workgroup's first order of business was to update the 2014 District Sustainability Plan. As the District is comprised of many different sustainability groups working towards common goals at SBCC, it is the priority of the Sustainability Workgroup to engage the SBCC Community to work together as a team. To better illustrate the organization SBCC Sustainability, refer to the organization chart below:



INVEST IN **TRANSPORTATION**

GOAL	Reduce Single Occupied Vehicle (SOV) commutes to campus by 25% by 2021[a]

ACTION PLAN **1**	Expand outreach efforts to New Employee orientation, employee in-service, and Vaquero Welcome (for new students). Encourage sustainable transportation for all new and existing employees and students and provide statistics on parking impacts and dollars saved.
ACTION PLAN **2**	Continue work with City, County, Amtrak, MTD and local non-profits on continued improvement of infrastructure that is more conducive to sustainable transportation opportunities including schedule adjustments for bus/ train, improved bike lanes, and walkability to/from campus. Promote carpool apps and zip car.
ACTION PLAN **3**	Create programs for bike share (partnership with City/UCSB), bikes that can be borrowed for short-term use, and create incentives to purchase electric bikes.
ACTION PLAN **4**	Continue to install more EV charging stations to encourage stakeholders to purchase electric vehicles. As campus needs grow for more fleet vehicles, the District will purchase the most sustainable choice vehicle (EV is 1st choice, followed by hybrid, depending on type of vehicle).
ACTION PLAN **5**	Perform a comprehensive mode count on October 11, 2018 to identify new reduction percentage of SOV commutes during the fall semester 2018. SBCC mode count is performed every 3 years.

PRIORITIZE **CAMPUS MESSAGING**

GOAL	Improve Campus outreach efforts through a variety of outlets

ACTION PLAN **1**	Focus messaging strategy to reflect that change is possible and cheaper for the commuter. Explain how commuters can save on gas, wear and tear on their vehicles, and insurance costs while helping to create a better environment.
ACTION PLAN **2**	SBCC Commute/Vice President to lead messaging via email and various social media modes to ensure more stakeholders are exposed to program detail, information, and campus infrastructure (existing and proposed) to streamline sustainable commuting.
ACTION PLAN **3**	Continue to solicit feedback from SBCC Commute members and other campus stakeholders on recommendations for improvement and encourage participation of all stakeholders. Increase campus communications about Campus Sustainability and increase social media campaigning.

[a] BENCHMARK: Current campus baseline is 13% reduction in SOV use (2014 baseline). The Main campus has approximately 2,500 parking spaces and over 14,000 stakeholders commuting to campus during the workweek. The SBCC

INVEST IN **WASTE REDUCTION**

GOAL	Divert 75% of campus waste from landfill and reduce overall waste generated by 10% by 2021[b]
ACTION PLAN **1**	Activate a sustainability Task Force comprised of City of Santa Barbara Environmental Services Representatives, MarBorg Industries, SBCC Facilities and Custodial, SBCC Food Services, and SBCC Purchasing and revise the current waste and recycling program.
ACTION PLAN **2**	SBCC to put together a Task Force to develop a Waste Management Plan based upon the Fall 2017 waste audit results to include: 1) Methods to decrease food waste and get as much good food as possible to students in need, 2) The evaluation of receptacle placement on campus, 3) Methods to capture and divert food scraps away from the landfill and into composting, 4) The evaluation of campus waste reduction signage, and strategies for achieving 10% reduction in total waste generated. Overall approach is to EDUCATE, IMPLEMENT, and ENFORCE.
ACTION PLAN **3**	Develop an Environmental Purchasing Plan (EPP) describing the purchasing criteria (including benchmarks and implementation strategies) for ongoing consumables, food, durable goods, and furniture.

PRIORITIZE **CAMPUS MESSAGING**

GOAL	Improve On Campus outreach efforts through a variety of outlets
ACTION PLAN **1**	Hold tabling events near the waste and recycling receptacles at the start of each new semester, provide education and outreach on waste reduction strategies, and how recycling and composting work on campus. Develop better bin signage to increase diversion rate.
ACTION PLAN **2**	Reduce and centralize waste and recycling locations in office buildings with proper signage.
ACTION PLAN **3**	Improve social media content and postings about waste reduction opportunities and achievements on campus. Utilize SBCC social media platform to convey messages.
ACTION PLAN **4**	During employee in-service day, provide an opportunity for stakeholders to take a tour at MarBorg Industries recycling centers. In addition to tour, provide suggestions on ways to reduce waste within employee day-to-day activities.

[b] BENCHMARK: Current campus baseline is 51% diversion (based upon waste audit conducted in November 2017). Audit included waste from inside buildings and exterior bins and did not include electronics and food. Identified streams: Plastic (1.6 lbs.), Comingle (98.6 lbs.), Cardboard (96.9 lbs.), Landfill (189.6 lbs.).

INVEST IN
WATER REDUCTION

GOAL	Reduce potable water use by 30% by 2021[c]

ACTION PLAN 1	Identify key departments or personnel responsible for maintaining water reduction strategies including fixture maintenance and monitoring.
ACTION PLAN 2	Conduct water audit of installed fixtures at each individual building and identify phase out plan to replace all fixtures with low-flow fixtures that meet EPA Water Sense standards or better. See campus water audit located on the SBCC Sustainability website for areas that need to be completed.
ACTION PLAN 3	Identify a plan to expand recycled water use to at Schott, Wake, and children's center and utilize for toilet flushing district-wide.

PRIORITIZE
CAMPUS MESSAGING

GOAL	Improve On Campus outreach efforts through a variety of outlets

ACTION PLAN 1	Hold tabled events and place signage on campus at the start of each new semester, and provide education and outreach materials for water conservation strategies and locations of water refill stations.
ACTION PLAN 2	Improve and standardize social media content and postings about water reduction strategies and campus achievements in water reduction. Develop Media Task Force to develop consistent messaging and program to reach all stakeholders.
ACTION PLAN 3	Identify and engage student stakeholder groups in the calculations of water use reduction to further educate on the importance of benchmarking improved performance and measures required for reduction.

[c] BENCHMARK: Current campus baseline is 22.59% water reduction (over 2014 baseline).

INVEST IN
3rd PARTY GREEN BUILDING VERIFICATION[d]

GOAL	All new buildings and major renovations to achieve LEED Silver certification and surpass Title 24 by 15%[e]
ACTION PLAN 1	All newly constructed or major renovated (new mechanical, electrical, plumbing) buildings over 5,000 square feet will pursue and achieve LEED Silver certification. In addition, buildings will surpass Title 24 (California's Energy Code) by 15% (per Chancellor's office requirements).
ACTION PLAN 2	Begin each project committed to LEED Silver at minimum certification. At design charrette, discuss campus-wide sustainability benchmarks and utilize LEED Campus Application Guide as well as precedence established by West Campus Center.
ACTION PLAN 3	SBCC will enroll applicable new construction/major renovation projects in Southern California Edison's (SCE) Savings By Design program for incentive money as well as any other rebate programs available at the time of design and construction of building.

PRIORITIZE
PERFORMANCE BENCHMARKING

GOAL	Install one main gas, electric, and water meter on all permanent buildings over 5,000 square feet by 2021[f]
ACTION PLAN 1	Working with a sustainability Task force, implement a phased approach for the installation of gas, electric, and water meters on all permanent buildings over 5,000 square feet.
ACTION PLAN 2	After the meters have been in place for a minimum of 1 year, benchmark building-performance through Energy Star Portfolio Manager.
ACTION PLAN 3	Work towards achieving Energy Star score of 75 or higher for every district building.

[d] 3rd party Green Building verification can be achieved through LEED, AASHE STARS, WELL, Living Building Challenge, and others. These rating systems add credibility to green building and provide external, 3rd party review and verification that green building compliance measures have been implemented during all phases of development.

[e] The West Campus Center achieved LEED Platinum certification and surpassed Title 24 by 16.3%.

[f] The West Campus Center has building level metering for gas, electric, and water. See Appendix A for additional strategy details.

INVEST IN
RENEWABLE ENERGY PRODUCTION

GOAL	Expand SBCC's renewable energy portfolio to 60% by 2021[f]

ACTION PLAN 1	Perform a feasibility study to determine appropriate locations throughout district for PV panels. This includes parking lots and roof space.
ACTION PLAN 2	Pursue creative funding mechanisms to finance solar energy including the consideration of Power Purchase Agreements (PPA) and partner with the SBCC Foundation for donor or grant funding opportunities.
ACTION PLAN 3	Research feasibility of the campus becoming Fossil Free (https://gofossilfree.org) by 2033, to align with the Community Environmental Council (CEC) goal for Santa Barbara County.

PRIORITIZE
CAMPUS MESSAGING

GOAL	Improve On Campus outreach efforts through a variety of outlets

ACTION PLAN 1	Develop a platform for sharing energy usage data to campus stakeholders in order to provide education of how stakeholders can be part of making improvements on campus. Promote the importance of having metered data.
ACTION PLAN 2	Continued stakeholder education on energy conservation measures (utilizing Energy Star recommendations) including disconnecting or turning off all nonessential loads (lights, computers, miscellaneous office equipment, etc.). Work with student groups on assisting with outreach and training to departments.
ACTION PLAN 3	Facilitate campus sustainability tours and ensure proper signage is in place to educate stakeholders of specific measures the campus is pursuing to ensure long term energy efficiency. Provide a new building orientation to building occupants to understand the design elements, technology, and long-term operational goals of building.
ACTION PLAN 4	Utilize social media and campus events as an opportunity to educate stakeholders about the value of benchmarking building performance data and how SBCC is taking actions to be the most sustainable community college in California. Incorporate online resources and data into curriculum (i.e. ENVS labs).

[f] Campus currently has a 200kw photovoltaic system.

INVEST IN
FOOD AND NUTRITION

GOAL	Purchase 30% local ingredients (within 100 miles), purchase 20% USDA certified organic ingredients, and increase vegan options to 25% by 2021[g]

ACTION PLAN 1	Determine current percentage of local and organic ingredients purchased at on-campus food service venues. Determine the source of local organic ingredients by creating production lists and schedules, ways to limit costs through planning and confirming product selection, and the feasibility of providing fresh produce to campus by reaching out to local farms.
ACTION PLAN 2	SBCC Food Services to plan to provide vegan entrees five times per week by 2021 and include fresh vegan items in the salad bar, depending on what is in season. By 2021, SBCC Food Services to provide 50% meat options, 25% vegetarian options, and 25% Vegan options.
ACTION PLAN 3	Increase use of Fair Trade ingredients and coffee materials, starting with two per food service outlet by 2019 and increasing to four options per outlet by 2021. Switch espresso options to Fair Trade and determine feasibility of offering Fair Trade for other commodities relative to cost and availability.
ACTION PLAN 4	Purchase Biodegradable Products Institute (BPI) Certified cups, cutlery and to-go boxes, and increase post consumer composting within food service venues and around campus. Identify how to segregate pre- and post-consumer food scraps so less water is used in disposal and create a stay and eat culture to off set to-go culture on campus.
ACTION PLAN 5	Using data collected in Food Insecurity study, increase access to healthy food for all students and work towards decreasing food insecurity on campus. Find healthy ways to provide unused food to students in need.
ACTION PLAN 6	Maintain campus production of organic produce for the campus SBCC Food Pantry.

PRIORITIZE
CAMPUS ACTION PLANNING

GOAL	Improve On Campus outreach efforts through a variety of outlets

ACTION PLAN 1	Develop a platform for sharing impacts of more sustainable food choices. Prices may be higher for local fish, meats, and produce but purchasing local supports community, local farmers, and fisherman. The result is a greater connection with community and reducing environmental degradation.
ACTION PLAN 2	Work with campus permaculture garden to harvest produce and use on site for SBCC Food Pantry . Encourage native bees to pollinate herb garden and determine feasibility for placing honeybees on campus roof or other appropriate location.

[g] BENCHMARKS: Current food offering at on-campus food service venues includes 17% vegan, 24% vegetarian, and 59% meat. Quantity of organic purchases and local ingredients is still being determined.

ACTION PLAN **3**	Identify ways to publicize vegan nutrition equivalencies to better educate people of alternative nutritional selections. Work with student groups on messaging and outreach.
ACTION PLAN **4**	Establish and implement ways to promote “only buy what you will eat” to reduce overall food waste that ends up in trash/compost, including providing smaller food containers.
ACTION PLAN **5**	Develop easy to use communication system to alert food insecure students of available food on campus

APPENDIX A: Building Metering Strategy

With a goal of installing one main gas, electric, and water meter on all permanent buildings over 5,000 SF by 2022, SBCC has identified the following achievements and strategies for ensuring successful installation. Once all installed meters are in operation and 12 months of data is complied, SBCC will benchmark building performance through Energy Star Portfolio Manager (www.energystar.gov)

The Sustainability Task force has captured a comprehensive meter inventory, which identifies buildings with meters already installed, buildings that need metering, and required meter sizes. The inventory (see Appendix D) also provides a conservative estimate of the cost of meters and installation.

WEST CAMPUS
SBCC has installed the following meters on most West Campus buildings and has identified a timeline for the install of remaining meters, which include the following:

Building	Gas	Electric	Water	Timeline Complete Install
Drama Music/Garvin Theater Building (GT/DM)		✔		TBD
Business and Communications (BC)		✔		TBD
Interdisciplinary Center (IDC)		✔		TBD
Library/Learning Resource Center (LRC)		✔		TBD
West Campus Center	✔	✔	✔	Complete
Facilities & Operation (FO)				TBD

EAST CAMPUS
East Campus buildings do not have metering at this time and will utilize a phased approach for the installation of gas, electric, and water meters for the following:

Building	Gas	Electric	Water	Timeline Complete Install
Administrative Services (A)				Fall 2019
Marine Diving Technology (MDT)				Fall 2019
Occupational Education, SBCC				Fall 2019
Facilities & Operation (FO)				Fall 2019
PE/Sport Pavilion				Spring 2020
EBS				Spring 2020
Campus Bookstore (CBS)				Spring 2020
Administration (Admin)				Spring 2020
Campus Center (CC)				Summer 2020
Humanities (H)				Summer 2020
Physical Science Building (PSB)		✔		Summer 2020
Student Services (SS) SBCC				Summer 2020

APPENDIX B: Stars are suggested locations of PV system placement

APPENDIX C: Sustainable Food System on Campus

SBCC is developing a sustainable food system on campus that has the following goals:

1. Replace unused lawn area on campus with organic food production
2. Feed students in need through the SBCC Pantry
3. Create native habitat
4. Make the best use of water and trap run-off
5. Provide meaningful and relevant opportunities for students

SBCC is part of the Higher Education Impact Group on Food Security through the Santa Barbara County Food Action Plan. As such we are working with 3 other colleges (UCSB, Allan Hancock College, and Westmont College) to better understand food insecurity among our students and develop strategies to best address the need. These efforts are currently supported by a Santa Barbara Foundation L.E.A.F. grant and a USDA study grant.

We expect this project will result in better coordination among the many efforts already in place at SBCC including EOPS, The Equity Group, the International Student Office, and the Center for Sustainability. We also expect that the multi-campus collaboration will result in emergent benefits on a countywide scale. To date we have already collaborated on a lecture series and resource website (http://food.ucsb.edu/home2). The website is housed with UCSB and has pages for each college (http://food.ucsb.edu/region/santa-barbara-city-college).

In Spring 2019 we will start our data collection on the causes and issues surrounding food insecurity at SBCC, AHC, and UCSB. Student interns at each campus will facilitate this using surveys, interviews, and focus groups. These data will be analyzed by a team at Westmont College and used to inform the further development and coordination of our efforts.
Data collected through these efforts will be used to apply for a USDA implementation grant to carry out the strategies developed. The collaborative nature of this program involving four colleges makes the effort more efficient, powerful, and attractive to funding. The fact that many students from SBCC transfer to UCSB increases the effectiveness of our programs because there is a consistency of methods and resources.

Ultimately, our goal is to decrease or eliminate food insecurity on our campuses while providing beautiful and functional landscapes and opportunities for students to engage in meaningful work. This is a huge and intricate challenge with elements outside of our control, but we feel we can optimize our efforts on campus and help students navigate and connect with resources on and off campus.

As a group, UCSB, SBCC, and AHC, represent more than 50,000 students, which is approximately 10% of the entire county population. As such, we hope our program will also influence countywide efforts.

APPENDIX D: Meter Inventory and Cost Analysis

WEST CAMPUS			
Building	**Electric**	**Gas**	**Water**
Drama Music/Garvin Theater building (DM/GT)	COMPLETE	$650- $1200	$900
West Campus Center (WCC)	COMPLETE	$650- $1200	$900
Business and Communications (BC)	COMPLETE	COMPLETE	COMPLETE
Interdisciplinary Center (IDC)	COMPLETE	$650- $1200	$900
Library Learning Resource Center (LRC)	COMPLETE	$650- $1200	$900
Facilities and Operations (F&O)	$800	$650- $1200	$900

EAST CAMPUS			
Building	**Electric**	**Gas**	**Water**
Administrative Services (A)	$800	$650- $1200	$900
Marine Diving & Technology	$800	$650- $1200	$900
Occupational Education	$800	$650- $1200	$900
PE/Sports Pavilion (PE)	$800	$650- $1200	$900
Campus Store (CBS)	$800	$650- $1200	$900
Campus Center (CC)	$800	$650- $1200	$900
Humanities (H)	$800	$650- $1200	$900
Physical Sciences Building (PSB)	$800	$650- $1200	$900
Student Services (SS)	$800	$650- $1200	$900

Install: M and M Mechanical
EMS Programming: Tim Co