## Diversity and Affordability (DA)

Diversity and Affordability Tier Two Credits

## Human Resources

Human Resources Tier Two Credits

## Investment

Investment Tier Two Credits

## Public Engagement

Public Engagement Tier Two Credits

### Category 4: INNOVATION

**APPENDIX**
Executive Summary

Sustainability, as defined by the Brundtland Commission in 1987, means “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” Often times, the concept of sustainability is interpreted in practices as integrating the “Three E’s” of environment, economics, and equity into our plans and actions.

Sustainability holds special significance to San José State University and our fellow institutions of higher learning, since a large part of our job is educating our students on what it means to think and behave sustainably. Helping our students understand the inter-relationships between human systems that include product development, global economics, consumer behavior, and waste management, and their effect on natural systems, makes them better critical thinkers. It also makes them better problem solvers and provides a strong foundation for taking leadership roles in our community. Today, it does not matter whether you are majoring in Organization and Management or Art and Design—sustainability matters in all fields. In fact, having graduates who are “sustainability literate” is increasingly important to major employers of our alumni, which include the City of San José, Adobe, Cisco, Hewlett-Packard, and other prominent organizations in the Silicon Valley.

Another important function of the University is to practice what it teaches. For sustainability, this means minimizing the ecological footprint of the physical campus and making an operational commitment to address important sustainability topics such as green building, climate change, water conservation, and waste minimization.

In 2009, the University became a signatory to the Taillores Declaration, an international compact signed by over 350 universities in over 40 countries. This document commits SJSU to sustainability as an institution. In 2010, the Academic Senate voted to establish a Sustainability Board, a representative body responsible for setting SJSU’s sustainability goals and monitoring progress towards their achievement. Conducting the sustainability audit that you will be reading about is an important step in recognizing and realizing the potential for sustainability on campus.

In the following pages, you will see how we performed in aspects of sustainability ranging from the number of courses we offer that are focused on sustainability to the percentage of on-campus food that comes from local sources. We are happy to report that in its inaugural year, SJSU earned a Silver rating, indicating that overall our sustainability efforts have been good. Strengths we should be proud of include the following:

1. Breadth of sustainability course offerings- of our 62 departments, 40 (64%) offer at least one course related to or focused on sustainability. Altogether, our students have 328 such courses available to them.

2. Depth of faculty involved in sustainability research- important work on pressing sustainability issues of the day, from climate change education to organic gardening, is taking place in departments all across campus. Over half of all our departments have at least one faculty member active in sustainability research. This accounts for 18% of our tenure and tenure track faculty members.
3. Student involvement- at least nine student organizations are focused on sustainability education and activism, reaching over 19,000 students a year.

4. Transportation- 59% of students and 49% of employees use alternative transportation (e.g., bike, bus, train) to come to campus.

5. Food- almost 24% of our food is purchased from local sources.

6. Energy – over the five year period from 2005 to 2010, total building energy use was reduced from 447,049 MMBtu to 427,507 MMBtu

7. Human Resources and Diversity—our policies and programs demonstrate leadership in the CSU. We ensure our employees are paid and treated fairly and that respect for and celebration of diversity is an everyday practice.

8. Innovation- the Martin Luther King, Jr. Library and the Green Wave energy auditing program demonstrate how SJSU has successfully partnered with the City of San José on shared sustainability goals of strengthening the community with the City of San José.

And while our overall rating was good, the audit reveals several areas where significant efforts are needed for us to be on par with peer institutions and for us to be in sync with the needs of important Valley employers and partners. To improve, more attention is needed in the following areas:

1. Climate Change Strategy and Planning, and Policy -while several University or CSU policies and guidance documents exist on specific areas of sustainability (e.g., procurement, energy conservation), the University lacks a comprehensive framework that has the support of top administration. Most universities at the forefront of sustainability have such policies in place.

2. Ensuring Student Sustainability literacy- about 60% of our students graduate from SJSU without a guaranteed basic understanding of sustainability issues and solutions.

3. Sustainability in New Student and New Employee Orientation- students, faculty, and staff have opportunities to engage in sustainability workshops and events on campus, but only if they know about them. Incorporating short but informative sustainability modules into orientation and training can get everyone off to the right start and strengthen the culture of sustainability that we are building on campus.

4. Having LEED-Certified Buildings- the LEED standard has been recognized across the U.S. as the mark of a green building. For SJSU to be considered a resource for green technology, the university should make its own commitment manifest in new and existing buildings.

5. Continuing Support of Current Sustainability Efforts- with a new administration in place, it is important to provide support and resources for people and projects that enabled us to earn a Silver rating in the first place. Our current rating is good for three years, at which time we hope that SJSU can build upon its achievements to date.

This report contains a number of useful and practical recommendations (with resources on where to get more information) that we can start working on today. When implemented, they will make our campus a model of sustainability in Silicon Valley and beyond.
This means that each of us—every student, faculty, staff, and community member—should consider what sustainability means to us, and how we might incorporate some of these recommendations into our lives. If you are inspired after reading this report, I encourage you to contact a Sustainability Board member and see how you can participate. We welcome your input and support.

In appreciation,

Katherine Cushing, Ph.D.
Associate Professor of Environmental Studies
Director of Sustainability in the Office of the President (AY 09-10 and AY 10-11)

Anne Marie Todd, Ph.D.
Professor of Communication Studies
Chair, University Sustainability Board

Adam Bayer
Director, Energy and Utilities
Sustainability at San José State University

In March of 2011, San José State University embarked on a sustainability audit of the University by participating in a campus-wide sustainability assessment known as STARS - Sustainability Tracking and Assessment Reporting System, developed by the Association for the Advancement of Sustainability in Higher Education (AASHE). Conducting the sustainability audit was an important step in recognizing and realizing the potential for sustainability on the campus. The rationale for conducting the audit at SJSU was driven by the need for the following outcomes:

- Need to gather baseline data set for the diverse range of activities that fall under the SJSU’s sustainability umbrella, to “understand where we are”.
- To demonstrate SJSU leadership and commitment to sustainable policy and outcomes on campus.
- To compare the campus with other CSU’s and local peer institutions.
- To provide data to the Sustainability Board and President’s Cabinet for focus on establishing sustainability goals and monitoring progress.

All of the above desired outcomes were achieved. The STARS audit information provides an established sustainability baseline for several if not all campus departments, provides targeted goals for increased sustainable achievement, and provides clear metrics for future policy development. The audit results also provide public acknowledgement of SJSU sustainability status.

### Recent History of Sustainability at SJSU

<table>
<thead>
<tr>
<th>Date</th>
<th>Action(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March ’08</td>
<td>Academic Senate creates Sustainability Task Force</td>
</tr>
<tr>
<td>Feb ’09</td>
<td>Associated Students pass sustainability resolution</td>
</tr>
<tr>
<td>May ’09</td>
<td>Task Force report issued</td>
</tr>
<tr>
<td>Summer ’09</td>
<td>Sustainability Director position created</td>
</tr>
<tr>
<td>Aug ’09</td>
<td>Taillores Declaration signed</td>
</tr>
<tr>
<td>AY ’09-’10</td>
<td>Ecological Footprint Challenge, Sustainability Matters, policy creation; Sustainability Board established; FIR program</td>
</tr>
<tr>
<td>AY ‘10-11</td>
<td>Green Wave; strengthening of City relationship; Frances Moore Lappe lecture;</td>
</tr>
<tr>
<td>AY ’10-11</td>
<td>Campus-wide STARS sustainability audit</td>
</tr>
</tbody>
</table>

### Results of the SJSU Audit

San José State University earned a STARS Silver rating, one that is consistent with the ratings of the 2 other CSU campuses reporting during the same period (CSU Channel Islands and Cal Poly Pomona).

The minimum score required to earn STARS Silver is 45 points and the minimum required score for a Gold rating is 65 points. San José State University earned STARS Silver with a score of 50.52 total points.
The silver rating that SJSU earned in its inaugural year of reporting indicated that overall the SJSU sustainability efforts have been good. Some of the universities strengths brought to light by the audit results include the following:

1. Breadth of sustainability course offerings—of our 62 departments, 40 (64%) offer at least one course related to or focused on sustainability. Altogether, our students have 328 such courses available to them.

2. Depth of faculty involved in sustainability research—important work on pressing sustainability issues of the day, from climate change education to organic gardening, is taking place in departments all across campus. Over half of all our departments have at least one faculty member active in sustainability research. This accounts for 18% of our tenure and tenure track faculty members.

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And while our overall rating was good, the audit revealed several areas where significant efforts are needed to bring SJSU up to par with peer institutions and to be in sync with the needs of important Valley employers and partners. More attention is needed in the following areas:

1. Climate Change Strategy and Planning, and Policy—While several University or CSU policies and guidance documents exist on specific areas of sustainability (e.g., procurement, energy conservation), the University lacks a comprehensive framework that has the support of top administration. Most universities at the forefront of sustainability have such policies in place.

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The pages of this report contain the details of how SJSU performed in each aspect of the STARS sustainability audit. The information contained within spans several different aspects of sustainability and includes assessment and recommendations for moving forward with sustainability policy and practice in each category that STARS rates.

This report provides useful and practical recommendations (including resources on where to get more information) that SJSU can start working on today in order establish SJSU as a model for sustainability in Silicon Valley and beyond.

**STARS Scoring Methodology**

STARS is a voluntary self-reporting framework for colleges and universities to gauge progress toward sustainability and to be recognized for sustainability leadership. The overall STARS score is earned by taking an average of the three main STARS categories and then adding any additional innovation points earned. The three main categories in the STARS rating system are:

1. Education & Research
2. Operations
3. Planning, Administration & Engagement

Each STARS category is broken up into subcategories, each of which covers a different area of focus. The subcategories are broken up into different credits, and points are earned by meeting the criteria stated in a particular credit. Each credit is scored as outlined in the STARS Technical Manual. Tier One credits are worth between 1 and 14 points. All Tier Two credits are worth 0.25 points.

In addition to the three main categories, institutions can earn up to four additional innovation points. Innovation points allow institutions to recognize areas of advancement that are not covered by any of the STARS credits within the three main categories. To qualify for an innovation point, the institution must identify a path-breaking practice and/or performance that is not covered by other STARS credits or that exceed the highest criterion of a current STARS credit. The following table demonstrates how the STARS score of 50.52 was earned by San Jose State University:
SJSU earned a total score of 50.52 points which qualified the University a STARS Silver rating. This rating is on par with the other 2 CSU campuses (CSU Channel Islands and Cal Poly Pomona) that also reported a STARS score of Silver during the same period. The figure below compares the STARS score of California STARS rated institutions.
SJSU STARS Audit Results by Category

EDUCATION & RESEARCH – Findings

This category focuses on sustainability education both within and outside the formal curriculum. Points are earned in this category for having sustainability themed co-curricular activities, a formal sustainability curriculum, and sustainability research conducted by faculty and students. SJSU earned 54.2 points total in this category.

SJSU earned points in the Co-curricular Education subcategory for the peer-to-peer student educator programs run by the Environmental Resource Center (ERC), the Nutrition Education Action Teams (NEAT) through the Nutrition, Food Science and Packaging Department, and Wellness and Health Promotion (WHP) through the Student Health Center. These peer-led education activities focus on developing healthy lifestyles and taking responsibility for one’s own health.

Points were also earned in this subcategory for the Ecological Footprint Challenge. The Ecological Footprint Challenge provided sustainability outreach by helping SJSU students, faculty, staff, and the public understand how their choices affect the quantity and quality of the Earth’s resources.

Four STARS points were earned for the various sustainability outreach publications available on the SJSU campus, such as: The Green Scene Guide on Sustainability, Spartan Daily (featuring monthly articles related to sustainability), Sustainability Office Website, and Published Sustainability Courses and Degree Programs Guide.

The Curriculum subcategory recognizes institutions that have formal education programs and courses that address sustainability. Although SJSU has significant room for improvement in this subcategory, the inventory of courses taken in conjunction with the STARS audit provides a great baseline for understanding just how much sustainability education has permeated SJSU. Specific highlights for which SJSU achieved credits in this subcategory are:

- SJSU has 159 sustainability-focused courses and 169 sustainability-related courses listed in the Course Catalog.
- In the 2010-2011 academic year, 291 sections of sustainability-focused courses were offered, along with 319 sections of sustainability-related courses.
- Of SJSU’s 62 academic departments, 40 of these offer at least one sustainability course.
- All seven of SJSU’s academic colleges offer at least one sustainability course.

The Research subcategory examines research activity that is either focused on or related to sustainability. SJSU earned points in this subcategory for faculty and departments engaged in
sustainability research. Out of the 663 ladder rank faculty in 2010/2011, there were 115 faculty members engaged in sustainability research. Out of the 62 departments at SJSU, 32 of the departments has at least one faculty member engaged in sustainability research.

EDUCATION & RESEARCH – Future Recommendations

Co-curricular Education: Additional points can be earned in the co-curricular education sub-category by incorporating a sustainability segment into the new student orientation at SJSU. Zero points were earned for this STARS credit, since a sustainability section is not part of the regular program at SJSU new student orientation.

Curriculum: A key area for development in this subcategory is to increase the number of courses offered that address sustainability directly. In addition, further points can be earned by offering incentives to faculty to help expand the sustainability course offerings.

Research: SJSU did not earn any points for providing incentives to encourage student and faculty members to conduct sustainability related research. The University can also earn additional points by giving positive recognition to interdisciplinary, trans-disciplinary, and multi-disciplinary research during faculty promotion and tenure decisions.

OPERATIONS – Findings

This category examines performance over a broad spectrum of operations considerations across campus. The areas where potential points are earned in the operations category are sustainable building construction, sustainability building operations and maintenance practices, reductions in campus-wide energy use, GHG emissions tracking and reporting, sustainability dining services, grounds maintenance, purchasing of sustainable materials, and sustainable campus transportation. SJSU earned 39.93 points total in this category.

In the Buildings subcategory, SJSU earned the minimum amount of points for having sustainable new construction and operations policies. No additional points were earned for having LEED certified buildings within the institution boundary. Moving forward, it is SJSU’s policy to pursue LEED certification on new buildings, and existing building certification on the King Library is currently pending.

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>Points Possible</th>
<th>Points Earned</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>13.0</td>
<td>2.6</td>
<td>-</td>
</tr>
<tr>
<td>Climate</td>
<td>16.5</td>
<td>2.6</td>
<td>-</td>
</tr>
<tr>
<td>Dining Services</td>
<td>8.5</td>
<td>5.3</td>
<td>-</td>
</tr>
<tr>
<td>Energy</td>
<td>16.5</td>
<td>5.73</td>
<td>-</td>
</tr>
<tr>
<td>Grounds</td>
<td>3.0</td>
<td>0.75</td>
<td>-</td>
</tr>
<tr>
<td>Purchasing</td>
<td>7.5</td>
<td>2.1</td>
<td>-</td>
</tr>
<tr>
<td>Transportation</td>
<td>12</td>
<td>6.2</td>
<td>-</td>
</tr>
<tr>
<td>Waste</td>
<td>12.5</td>
<td>7.2</td>
<td>-</td>
</tr>
<tr>
<td>Water</td>
<td>10.25</td>
<td>5.0</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL POINTS</td>
<td>99.75</td>
<td>38.93</td>
<td></td>
</tr>
</tbody>
</table>
While SJSU has tracked some greenhouse gas emissions since 1999, only 2.6 points out of 16.5 were earned in this subcategory, since current greenhouse gas emissions reporting does not fully comply with reporting in all emissions categories.

An internal calculation for 2010 scope 1 and 2 category greenhouse gas emissions was completed for the audit and compared to a 2005 baseline, reflecting a 7% reduction between the two years (0.0698 MT CO2 per person reduction). The reductions were primarily due to energy savings seen on campus. Currently SJSU does not have an institution specific mechanism for publicly reporting Scope 3 emissions which include commuting, air travel, and waste emissions. Other California institutions showed similarly low results for GHG emissions reductions, indicating the need for both system wide reporting and reduction improvements.

The **Dining** subcategory is an area where SJSU performed well. Every credit category earned full or partial points in this subcategory resulting in 5.3 points earned out of 8.5 points possible. Some of the earned points for the Spartan Shops include trayless dining, vegan dining, use of trans-fats free oils, food waste composting, napkins with recycled content, and a re-useable mug discount program. The credit in this subcategory that is worth the most possible STARS points is sustainable food purchasing. At SJSU, 23.92% of the food purchases are local (within 250 miles or campus) or organic; this earned SJSU 2.87 points out of 6.0 points possible for this credit. In addition to increasing the local/organic food purchases, SJSU can earn more points in this category by tracking food purchases that are third party certified (such as Blue Eco-label, Food Alliance or Fair trade).

While SJSU has placed a strong focus on energy saving measures in recent years, SJSU’s STARS score in the **Energy** subcategory identifies ways the university can further increase their sustainability performance in this area.

Currently SJSU earned 0.48 points out of 7.0 points for the renewable energy credit. These points were earned due to the cogeneration unit located on campus. SJSU earned 3.99 points out of 8.0 points possible for the reduction in building energy consumption credit. The campus cogeneration plant, building commissioning, and lighting retrofits efforts were all factors that contributed to a 9 million kWh annual energy use reduction (when comparing FY 05/06 to FY 09/10 usage). Moving forward, further energy savings are expected to be seen through installation of campus solar panels, setting high energy savings targets for new construction projects, and developing a comprehensive campus energy policy.

Other ways in which SJSU earned points in the energy subcategory is from the use of lighting sensors, LED lighting, energy metering, and a campus central energy management and controls system.

The **Purchasing** subcategory considers the institution’s computer purchasing, cleaning product purchasing, and office paper purchasing practices. Currently SJSU does not track purchases of EPEAT computers, so no points were earned for the computer purchasing credit.

SJSU did earn points for purchasing Green Seal cleaning products. All cleaning supply purchases for the King Library are sustainable products and the standards used for the King Library are currently being used to guide cleaning product purchasing for other buildings on campus. SJSU lacks a formally adopted campus-wide green cleaning product purchasing policy. For office paper purchasing, 0.78 points were earned out of 2 points possible for this credit.
Overall, SJSU scored slightly lower in recycled content purchasing compared to other California Institutions. Most institutions reported over 50% of office paper purchases containing recycled content, with SJSU reporting just under 40%. Additionally, no points were achieved for a vendor code of conduct policy to require vendors to meet minimum standards of environmental and social responsibility. SJSU currently does not have such a policy.

In the Transportation subcategory, SJSU earned points for electrically powered vehicles in the campus fleet, for strong percentages of students and faculty using alternative means of commuting, bicycle storage facilities, offering discounted transit passes, offering local housing options, and for offering condensed work week and telecommuting options for SJSU employees. Areas where SJSU did not earn STARS points were lack of a car sharing plan (such as Zipcar), for not having a cash out of parking option available, and for not having a campus biking plan.

SJSU currently has 107 electrically powered vehicles, 54% of the total vehicles in the campus fleet. For alternative commuting, 59% of students and a projected 49% of faculty use alternative means of transportation including carpooling, public transit, biking or walking. The SJSU Transportation Solutions (TS) center conducts a yearly student commute survey, tracking a 19% decrease in students driving alone to campus seen over the past 10 years. The SJSU TS center currently does not offer an employee survey.

The Waste subcategory is an area where SJSU is both showing high performance on some credits areas and a need for improvement on others. SJSU had high scores on the waste diversion credits. Nearly 100% of construction and demolition waste is diverted from landfills. In addition, the total amount of recycled or diverted waste on SJSU campus increased from 418 tons in 2005 to 4,111 tons in 2010. Conversely, the total waste generated increased between 2005 and 2010 from 0.170 tons/person annually to 0.199 tons/person annually. The largest increase seen is with the Mixed Dry Recyclables (paper, cardboard, plastic bottles, drinks cans, and glass bottles). SJSU earned 0 points in the waste reduction credit, due to this increase.

SJSU did earn points in the waste subcategory for having an electronic waste recycling program in place. SJSU uses an outside vendor to ensure proper, regulatory-compliant disposal of electronic equipment. Hazardous Waste is another credit category that earned points with the campus’s sustainable strategies to safely dispose of all hazardous, universal, and non-regulated chemical waste. SJSU also seeks to minimize the presence of these materials on campus.

Grounds: This subcategory recognizes institutions that maintain their grounds using Integrated Pest Management (IPM) practices. While guidelines are in place highlighting IPM practices to be followed on the SJSU campus, SJSU lacks a formal four-tiered institution specific IPM plan. Therefore, no points were earned for the IPM credit. SJSU did earn partial points in this subcategory for having native planting, a campus wildlife habitat, and also for composting yard waste.

Water consumption is an area that SJSU has achieved solid reductions. In 2005, annual water use was 8442 gallons/campus user, lowering to 7723 gallons/campus user by 2010. Cooling tower improvements and conversion of south campus grass to artificial turf have both contributed to the overall reduction in water use. SJSU also earned points for having stormwater management policies for both new construction projects and for ongoing campus operations. New construction projects are required to create a Stormwater Pollution Prevention Plan. The city of San José has strict policies mandating that nothing other than rain water can be discharged into the storm drains. Other areas that earned SJSU
points in the water subcategory was by having waterless urinals, building water metering, use of recycled water, and through Xeriscaping.

**OPERATIONS – Future Recommendations**

**Buildings:** SJSU should develop an Indoor Air Quality policy that meets STARS criteria. A STARS qualifying policy would include an institution specific IAQ plan as well as provisions for regular auditing and a mechanism for occupants to register complaints.

**Climate:** We recommend complete Scope 1, 2 and 3 greenhouse gas emissions reporting that is consistent with the American College and University Presidents Commitment to Climate Change (ACUPCC) Program recommended greenhouse gas emissions collection and reporting. From this baseline, specific reductions targets can be established and tracked, the entire campus can participate in the climate protection effort, and SJSU can participate on a national level to address and reduce greenhouse gas emissions.

**Energy:** Because the campus cogeneration unit is gas fired, it is not considered a renewable energy source and does not allow SJSU to earn full points for renewable energy. Additional points can be earned via renewable electricity generation (such as PV panels) produced either on- or off- campus as long as the institution retains rights to the energy produced.

**Grounds:** As SJSU does follow many of the practices recommended for a sustainable Integrated Pest Management plan, we recommend the development and acceptance of a formal IPM and the ongoing measurement of IPM impacts towards chemical use reductions on campus.

**Purchasing:** The Campus should consider a policy that requires the purchase of energy star computers and supporting equipment, and tracks campus wide purchases using the EPEAT program.

Considering the success that the campus has had with the Martin Luther King Library’s green cleaning and supply purchasing polices, the campus should adopt this program as a baseline for a formal green cleaning program across the campus.

Review overall purchasing polices and guidelines that support the purchase products that are manufactured locally, contain recycled materials, reduce packaging waste and are as energy efficient as possible. This policy review should include all vendor subcontractors and the materials they bring to the campus.

**PLANNING, ADMINISTRATION & ENGAGEMENT – Findings**

Planning, Administration and Engagement credits seek to measure the institutionalizing of sustainability by confirming how embedded sustainability is in the policies and activities of campus administrations. Many parts of this category relate to the social aspect of sustainability and include subcategories such as diversity, employee rights, socially responsible investments, and community engagement. SJSU earned 52.2 points total in this category.
The Coordination and Planning subcategory examines the institutions planning documents to see if sustainability has been incorporated into these guiding documents. The subcategory also examines resources the institution has dedicated to ensure that sustainability is incorporated into campus plans. SJSU earned credit in this subcategory for having a sustainability committee and coordinator. SJSU also earned credit for having a sustainability element incorporated into their physical campus master plan. The SJSU Strategic plan does not have a sustainability component, so no points were earned for the STARS credit related to campus strategic planning. Lastly, no points were earned for having a campus Climate Action plan. When SJSU implements a Climate Action plan, they will not only earn points in this subcategory, but it will help earn credits for GHG emissions reduction credits in the STARS Operations category.

SJSU earned 100% of the points possible in the Diversity and Affordability subcategory. This is not surprising, as diversity is an area of strength for the university. Points were earned in this subcategory for having a diversity committee (SJSU campus climate committee), for administering the SJSU campus climate survey, and for having support programs in place for under-represented groups. The SJSU Campus Climate Committee (CCC) is a presidential advisory group composed of faculty, students, administrators, and staff. Their mission is to actively promote a civil campus climate in support of the diverse campus at SJSU. The Campus Climate survey administered by this group is a campus wide survey that addresses perceptions of the campus climate and the degree of sensitivity on campus regarding racial/ethnic, gender, disability, and other issues. Some of the support groups for under-represented students on campus include Education Opportunity Program (EOP), LGBT resource center, MOSAIC, and federally funded TRIO programs. SJSU also has programs in place which support pursuits to seek future faculty members from underrepresented groups. These future faculty support programs, such as the Ronald Erwin McNair Post- Baccalaureate Achievement Award Program, earned SJSU additional points in the Diversity and Affordability subcategory.

The Human Resources subcategory examines programs and policies in place to ensure that employees are treated and remunerated responsibly and fairly. SJSU earned 8 points out of 8 points possible for the credit related to paying the prevailing wage to 100% of employees. SJSU also administers an employee satisfaction survey and provides sustainability trainings to employees, both of which earned SJSU additional STARS points in this subcategory.

SJSU earned no points for the STARS credit related to having an employee peer-to-peer sustainability outreach program. Such a program requires formal training for employees who could then educate and mobilize their peers around sustainability initiatives and programs. SJSU had a qualifying program in
2009 (the Faculty Residence Program); however as this program was not continued in 2010, SJSU did not earn any points for this credit.

While SJSU scored low in the Investment subcategory, the scores were consistent with other CSU STARS rated institutions which had similar scores, and are due primarily to CSU system-wide investment policy. Much of the credit criteria is centered on the institution taking an active role in their investing, and currently SJSU has a third party handle the investments based on the Tower Foundation Investment policy. Since SJSU is a passive investor, they do not meet STARS requirements such as filing shareholder resolutions to address sustainability, conducting screening of their investment pool, or having an active committee that reviews all investments from a socially responsible standpoint. However, SJSU did earn partial credit for having a social responsibility investment policy contained within their Tower Foundation investment policy.

The Public Engagement subcategory examines the institutions’ involvement in their communities through community service, engagement, and partnerships. SJSU earned points in this subcategory for the CommUniverCity program, which partners with the local community to engage students in civic life while addressing the community development priorities identified by neighborhood residents. SJSU’s partnership with other institutions in support of the advancement of sustainability was another area which earned SJSU points. Collaboration between SJSU and other universities has occurred at the AASHE 2010 conference, Sustainable Silicon Valley (SSV), and the “This Way to Sustainability” Conference held at CSU Chico.

SJSU earned points for promoting sustainability through public policy advocacy. Advocacy occurred for policies at all levels of government: local, state, and federal. Points were also earned for the SJSU athletic logo licensing department’s participation in the Fair Labor Association.

**PLANNING, ADMINISTRATION & ENGAGEMENT – Future Recommendations**

**Coordination and Planning:** As it currently stands, the sustainability section is an addendum to the existing master plan. When the master plan is updated, include sustainability as a fully integrated section in the main body of the document. Include sustainable goals in the campus strategic plan and make sure the goals are clear and can be measured. Use the STARS credit categories as a baseline for a sustainable action plan that can be incorporated across all campus departments.

SJSU should develop a Climate Action plan in accordance with the ACUPCC polices. A plan developed under these guidelines will allow SJSU to engage in a national effort to reduce greenhouse gas emissions, focus on energy reductions, and elevate the campus commitment to climate preservation to be comparable with many of its peer institutions.

**Human Resources:** The campus should include a sustainability related section into new employee orientation, as it does for new student orientation. Consider some of the other credit options not achieved such as a peer to peer outreach program with formal training, and support for sustainability efforts and initiatives or reinstituting the Faculty Residence Program.

**Investment:** While it may not be beneficial for the campus to change current investment practices, consider a review of the current investment policy as it pertains to sustainability and adjust as needed to reflect the campus goals of diverse sustainability commitment.
Public Engagement: One area with room for improvement is the community service efforts and tracking of these on campus. Currently the only tracking of student community service occurs through the SJSU Center for Community Learning and Leadership (CCLL). The reporting information tracks student participation in Service Learning Courses. It can be assumed that much more community service occurs at SJSU through various clubs and student activities; however, these hours are not tracked by the CCLL. If a mechanism is implemented to record all community service hours on campus, SJSU could see a higher STARS score in this area. Also, additional partial points could be earned for indicating a student’s community service activity on their transcripts.

INNOVATION CREDITS - Findings

The innovations category recognizes institutions that are seeking innovative solutions to sustainability challenges and demonstrating sustainability leadership in ways that are not otherwise captured by STARS. Four points are possible in this category for developing unique ways in which an institution is demonstrating innovation in sustainability. SJSU sought and received credit for two points in this category.

Innovation Credit 1 – Martin Luther King Library Community Partnership
The Community Partnership between SJSU and the City or San José in their joint management of the Dr. Martin Luther King Jr. Library is both noteworthy and unique among its peers. While many higher education intuitions seek town and gown relationships and open their campus grounds and buildings to some limited public use, the joint collection approach and full access to Library facilities and programs by both sides is rarely achieved. The SJSU King Library collaboration with the City alleviates the requirement to build separate but equal library facilities in the same city. The partnership has incubated and implemented innovative programs which otherwise would not have necessarily transpired and which support the three E’s of sustainability: economy, ecology, and equity. The library itself was designed to meet LEED standards for sustainability and is currently undertaking a LEED EBOM Certification.

Innovation Credit 2 - Green Wave
The GreenWave Program is unique in that it combines a strong training program for those students interested in sustainability focused careers, with an excellent energy reduction program for the local community. Few higher education institutions achieve both hands-on teaching in sustainably focused careers programs and community based energy reduction in the same program. The GreenWave program is an innovative energy audit program that trained 72 undergraduate and graduate students during the spring 2011 semester to conduct residential, office, and dorm room energy check-ups (audits) for the SJSU community and the City of San José employees. The Green Wave was recognized by the Center for Community Learning & Leadership for its successful partnership with the City of San José, Actera, & many SJSU departments. Green Wave student auditors and program coordinators also received a commendation from Mayor Chuck Reed in appreciation of their work supporting the City’s Green Vision.
STARS Assessment per Credit

Section 1: EDUCATION AND RESEARCH

<table>
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<tr>
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<th>Points Earned by SJSU</th>
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<td>18</td>
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<td>27</td>
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Education and Research Highlight

Sustainability Courses

The STARS rating system recognizes the importance that courses focused on and related to sustainability play in educating our students for global citizenship. Credits in this category include defining, identifying, and publicizing sustainability courses, the percentage of courses offered that are focused on and related to sustainability, and the number of departments that offer sustainability-related courses.

These offerings contribute to overall sustainability efforts in a number of ways. First, sustainability-focused courses give students valuable grounding in the theories and concepts of sustainability, giving them the tools needed to address complex sustainability issues, such as climate change and water shortages. Second, sustainability-related courses help students understand how sustainability can be integrated into many disciplines and professions. Third, these courses often help connect students with the broad array of sustainability activities that take place on campus and in the community. In other words, sustainability courses often strengthen community connections. SJSU adopted a definition of sustainability-focused and -related courses in 2008 when the first inventory of sustainability courses was completed. This definition, which can be found in credit ER 5 below, was used again to update this inventory to attain STARS credits. Overall, SJSU attained 12.1 out of the 30 points available in the four credits pertaining to sustainability courses. Although there is significant room for improvement, this inventory of courses
demonstrates that sustainability education is present throughout course offerings at SJSU, from MUSE seminars to capstone course experiences. Specific highlights for which SJSU achieved credits are listed below, and more detail can be found in the appropriate credit sections in this report.

- SJSU has over 325 courses that are sustainability-focused or related. (159 sustainability-focused courses and 169 sustainability-related courses are listed in the Course Catalog)
- This up-to-date inventory of sustainability courses is available publicly on the SJSU Sustainability website.
- In the 2010-2011 academic year, 291 sections of sustainability-focused courses were offered, along with 319 sections of sustainability-related courses.
- Of SJSU’s 62 academic departments, 40 of these offer at least one sustainability course.
- All seven of SJSU’s academic colleges offer at least one sustainability course.

These last two points are perhaps the most impressive and show that sustainability education is broadly available at the university. A key area for development is to increase the number of courses offered. STARS gives 10 credits to academic institutions with sustainability-focused courses totaling 10% of all course offerings, and 10 credits to academic institutions with sustainability-related courses totaling 30% of all course offerings. Although most STARS reporting institutions are not close to either goal, averaging about 3% for both categories, SJSU has significant room for progress.

Increasing the number of course sections offered that have a central sustainability focus is one strategy for improving SJSU’s rating for the next STARS assessment. One way to promote sustainability course offerings would be to design and implement a Sustainability Across the Curriculum workshop in which faculty can learn and share knowledge on how to integrate sustainability education in different disciplines. Along with some incentive for faculty to either attend or to use information learned to develop new curriculum, this approach can be an important step towards increasing sustainability course offerings.

**Co-Curricular Education**

This category seeks to recognize institutions that provide their students with sustainability learning experiences outside the formal curriculum. Engaging in sustainability issues through co-curricular activities allows students to deepen and apply their understandings of sustainability principles. Institution-sponsored co-curricular sustainability offerings, often coordinated by student affairs offices, help integrate sustainability into the campus culture and set a positive tone for the institution.

13.6 out of 18 possible points were earned in this category

**ER Credit 1: Student Sustainability Educators Program**

**Credit Criteria:** This credit recognizes institutions with programs that engage students to serve as educators in peer-to-peer sustainability outreach. Such initiatives help disseminate sustainability concepts and a sustainability ethic throughout the campus community, and are a valuable learning experience for student educators. Five points are earned for serving 100% of students by peer-to-peer programs. To calculate partial points, the percent of students served is multiplied by a calculation factor of 5.

<table>
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<tbody>
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Credit Calculation:
- Fall 2010 number of students: 29,076
- Fall 2010 number of students served by peer-to-peer program: 19,150
- Calculation: $5 \times 19,150 / 29,076 = 3.3$ points

Assessment:
SJSU has three organizations that run peer-to-peer educator programs that qualify under this credit: the student-run Environmental Resource Center (ERC), Nutrition Education Action Teams (NEAT) through the Nutrition, Food Science and Packaging Department, and Wellness and Health Promotion (WHP) through the Student Health Center. The ERC trains students to educate peers during programs such as Ride to School Days, Bay to Brakes (to promote alternative transit), Sustainability Week, and Earth Day. NEAT trains students to educate their peers on topics such as sports nutrition, eating disorders, mindful eating, and fad diets. WHP offers a variety of peer-led education activities that focus on developing healthy lifestyles and taking responsibility for one’s own health.

Coordinators for each of these programs were interviewed to collect data on the number of students served. To account for students who may have been educated multiple times in one program, total students within programs were reduced by 20% when multiple opportunities for engagement existed. In addition, to account for students who may have participated in more than one of the three programs, the total number of students served was reduced by 20% (Appendix 1).

Resources:
- Environmental Resource Center: [http://erc.thinkhost.net/](http://erc.thinkhost.net/)
- Wellness and Health Promotion: [http://www.sjsu.edu/studenthealth/health_education/](http://www.sjsu.edu/studenthealth/health_education/)

Appendix:
See Appendix for Calculation Assumptions for ER 1

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**ER Credit 2: Student Sustainability Outreach Campaign**

Credit Criteria: *This credit recognizes sustainability outreach campaigns that yield measurable, positive results that either engage the student body in sustainability issues or help raise student awareness about sustainability. To receive the full credit, the campaign must be directed towards the student body and it must yield measurable, positive results in advancing sustainability. Institutions who meet the criteria earn the full five points, and partial points are not available for this credit.*

<table>
<thead>
<tr>
<th>Points Earned</th>
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<tbody>
<tr>
<td>Points Possible</td>
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</table>
Credit Calculation:
- SJSU earned the full five points for the Ecological Footprint Challenge run by the Office of the President in the 09/10 academic year.

Assessment:
The Ecological Footprint Challenge provided sustainability outreach by helping SJSU students, faculty, staff, and the public understand how their choices affect the quantity and quality of the Earth’s resources. The basis for the challenge was a licensed, customized version of the Ecological Footprint Quiz created by Redefining Progress and Center for Sustainable Economy. The online quiz was made available to the SJSU community and the general public. The quiz contained a series of lifestyle questions, including food choices, transportation and commute patterns, and consumption behaviors. Based on answers to these questions, the Ecological Footprint Quiz calculated a resource footprint, represented in acres, needed to sustain this lifestyle.

Following the Quiz, those who wished to continue in the Ecological Footprint Challenge could use this baseline value to measure a change in footprint over the course of the academic year. Participants could make voluntary lifestyle changes to positively influence his or her Ecological Footprint. The organizers of the Challenge offered resources to guide participants in ways to reduce their Ecological Footprint. Monthly workshops provided participants a medium for discussion related to sustainable practices at SJSU. Participants could also sign up for monthly sustainability tips via email. A printable worksheet helped participants determine steps to reduce their footprint by 10% or more. The data for creating this worksheet was based on the predominant SJSU response during the baseline data collection period in October 2009. Participants were invited to take the quiz again in April 2010, with the hope that the campaign would result in an overall reduced ecological footprint. Prizes and recognition were awarded to students, faculty, and staff with the largest footprint reduction and lowest overall footprint over the course of the academic year. On average, returning participants reduced their footprint by 10%.

Resources:
SJSU Ecological Footprint Challenge: [http://www.myfootprint.org/sjsu/](http://www.myfootprint.org/sjsu/)

Appendix:
See appendix for Ecological Footprint Presentation

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**ER Credit 3: Sustainability in New Student Orientation**

**Credit Criteria:** This credit recognizes sustainability in orientation activities and programming. Including sustainability in student orientation demonstrates that sustainability is an institutional goal and encourages students to adopt sustainable habits in their new school environments. Institutions that meet the

<table>
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<td>Points Possible</td>
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</table>
criteria earn the full two points, and partial points are not allowed for this credit.

Assessment:
SJSU currently does not meet STARS criteria for sustainability in new student orientation.

Recommendation:
While sustainability has been addressed in an ad hoc fashion at new student orientation events, it is not part of regular programming. Incorporating sustainability into new student orientations will enhance SJSU’s potential to achieve sustainability in both academics and operations. Specific strategies that complement current practices at SJSU are listed below. Most suggested activities could be disseminated through Student Affairs and coordination with the various environmental groups on campus, such as GreenWave, Environmental Resource Center, Solar Energy Engineers Club, GROW, Environmental Club, Recycled Water, and others (see ER Tier 2 Credit 1 for a complete list).

- Have tables for sustainability organizations and departments during orientation events.
- In conjunction with the above, recruit student interns and volunteers with a “Sustainability Fair” during orientation.
- Make a new student orientation and “zero waste” event.
- Hand out sustainability literature, such as the Green Scene, and educational brochures during orientation or dormitory move in. This could include some of the materials and publications listed in ER Credit 4.
- Train orientation staff on key campus sustainability efforts to integrate this information into campus tours.
- Hand out reusable bags and coffee mugs, easy energy efficiency items such as CFL bulbs, or environmentally friendly t-shirts during new student orientation.

Appendix:
See Appendix for Examples of Sustainability in Campus Orientation

<table>
<thead>
<tr>
<th>ER Credit 4: Sustainability Outreach and Publications</th>
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</thead>
<tbody>
<tr>
<td><strong>Credit Criteria:</strong> This credit recognizes outreach materials and/or publications that foster sustainability learning and knowledge. For this credit, 0.5 is earned for each publication and/or material that fits the criteria, with a maximum of 4 points for eight or more publications or outreach materials.</td>
</tr>
<tr>
<td>Points Earned</td>
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<tr>
<td>Points Possible</td>
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</tbody>
</table>

Credit Calculation:
- SJSU received the full points for this credit by producing more than eight outreach materials/publications that matched the criteria for this credit.

Assessment:
SJSU has many publications that fit the criteria, showing that strong efforts are being made to provide sustainability information to the student body. Based on interviews with students and faculty involved in
sustainability efforts, nine qualifying materials were gathered to attain points for this credit. For a more complete list of sustainability outreach and publications, please see Appendix 4.

1. Sustainability Newsletter
2. Sustainable Transportation Options
3. Solar Workforce Project Blog, College of Business
4. Green Scene Guide on Sustainability
5. Spartan Daily (monthly articles related to sustainability)
6. Sustainability Office Web Site
7. Published Sustainability Courses and Degree Programs Guide
8. Environmentally Preferable Purchasing Guide
9. Sustainable Facilities Development & Operations Overview

Appendix:
See Appendix for Details on SJSU Sustainability Publications

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**Co-Curricular Education Tier Two Credits**

**Co-Curricular Education Tier Two Credit 1: Student Groups**

**Credit Criteria:** This credit recognizes institutions that have active student organizations focused on sustainability.

**Credit Calculation:**
- SJSU received the full 0.25 points for this credit by having multiple student groups that meet the STARS criteria.

**Assessment:**
There are at least nine student groups that meet the criteria for this credit, well beyond what is required for the credit. Here we highlight three groups:

The Environmental Resource Center (ERC) is a student-run organization affiliated with the Department of Environmental Studies and funded by the Associated Students and Transportation Solutions. The ERC was established in 1967 and is responsible for the annual Earth Day celebration, an environmental library, and other projects that promote sustainable living. The ERC started the campus recycling program and the alternative commute-planning program that has now grown into Transportation Solutions. More information regarding the ERC is found at: [http://erc.thinkhost.net/](http://erc.thinkhost.net/).

The SEEC at SJSU aims to promote and develop solar energy technologies. The club explores the growing solar energy industry by working on projects focusing on assessment, analysis, and system design. The club serves as an educational forum for discussion and cooperation between students, faculty, and customers, as well as a networking opportunity within the industry. More information can be found at: [http://www.facebook.com/group.php?gid=137793462904400&v=info](http://www.facebook.com/group.php?gid=137793462904400&v=info).
Formula Hybrid is a design and engineering challenge for undergraduate and graduate college and university students. They must design, build, and compete an open-wheel, single-seat, plug-in hybrid racecar. This car must conform to a formula that emphasizes drive train innovation and fuel efficiency in a high-performance application. More information can be found at: http://www.engr.sjsu.edu/~sae/formulahybrid/index.html.

Other student groups that meet the requirements are:

- Center for the Development of Recycling: http://www.recyclestuff.org/
- Environmental Club: http://www.facebook.com/environmentalclub.sjsu
- Growing Roots of Wellness (G.R.O.W.): http://growsjsu.wordpress.com/about/
- ETHOS (Engineering To Harness & Optimize Sustainability): http://www.engr.sjsu.edu/ethos/index.htm
- Nutrition/Food Science Clubs (NuFS): http://groups.yahoo.com/group/NuFS_Club/

Appendix:
See Appendix for Details on SJSU Sustainability Student Groups

Co-Curricular Education Tier Two Credit 2: Organic Garden

Credit Criteria: This credit recognizes on-campus gardens where students are able to gain organic farming and/or gardening experience. The garden does not have to be Certified Organic, but it should use organic techniques.

Credit Calculation:
- SJSU received the full points for this credit as a result of multiple campus gardens.

Assessment:
Multiple gardens on the SJSU campus meet the STARS requirements, which are listed below. Growing Roots of Wellness (G.R.O.W.) is a SJSU Campus garden collective connecting and empowering students, faculty, staff, and community members to reclaim and cultivate fresh, local, and healthy food by establishing, expanding, and maintaining multiple urban garden plots. Although SJSU earned full credit, there is considerable room for growth in this area by expanding the size of gardens and/or engaging more students.

1. Sustainable Agriculture Garden, Environmental Studies Department
2. Native Botany Garden, Biology Department
3. Sculpture Garden, Growing Roots of Wellness
4. Event Center Gardens, Growing Roots of Wellness
5. Greenhouse 7th floor, Duncan Hall, Biology Department

Resources:
Map of SJSU garden: http://growsjsu.files.wordpress.com/2011/01/sjsu_campus_map_gardens.jpg
Photos of Sustainable Agriculture Garden:  
http://www.flickr.com/photos/62829276@N07/with/5719778236/

Co-Curricular Education Tier Two Credit 3: Model Room in a Residence Hall

Credit Criteria: This credit recognizes institutions with an occupied, formally designated model room in a residence hall that is open to students during regular hours and demonstrates sustainable living principles. This credit applies to all institutions that have residence halls.

Assessment:  
SJSU currently does not meet STARS criteria for a model room in a residence hall.

Recommendation:  
SJSU could work in collaboration with Housing Services on creating a model space to display sustainable products that promote sustainable living practices. As far as prioritizing SJSU efforts to improve sustainability on campus, this would be a lower priority action since it would be quite expensive to implement and would not directly result in a large reduction of impact. On the other hand, investing in green building and making dorm rooms more environmentally friendly is an important goal, which would be reflected in credits in the OP section. There are very few STARS rated universities that received points for this credit. Portland University and Duke University offer the best examples available for items included in this model room, details of which can be found in Appendix 6. In addition, information on an undergraduate effort to create a green dorm room at UCSC can be obtained on request from the SJSU Sustainability Office.

Appendix:  
See Appendix for Details on model dorm room at other universities

Co-Curricular Education Tier Two Credit 4: Themed Housing

Credit Criteria: This credit recognizes sustainability-themed housing (residential hall or floor theme house) where residents learn about sustainability together and to which residents must apply. The focus of this credit is creating a residential sustainability learning community.

Credit Calculation:

- SJSU received the full points for this credit by offering a themed housing option that meets the STARS requirements.

Assessment:
SJSU offers a themed house called the Global Village at the Joe West dormitory, which focuses on global issues including sustainability topics. Global Village students:

- Develop a stronger understanding of global issues, including current and historic
• Gain insight into their values and the values of other cultures
• Discover their roles and responsibilities to become a productive member of the global community
• Encourage intellectual and personal growth including the ability to see many perspectives and draw individual conclusions
• Cultivate skills to foster meaningful relationships within and across cultures
• Create an environment that supports the quest for knowledge
• Learn more about global opportunities through SJSU

Resources:
Global Village Web Site: http://housing.sjsu.edu/pros_community.html

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Co-Curricular Education Tier Two Credit 5: Sustainable Enterprise

Credit Criteria: This credit recognizes institutions that have a student-run sustainable enterprise, such as a café, through which students gain sustainable business skills. The enterprise includes sustainability as part of its mission statement or stated purpose.

Assessment:
SJSU currently does not meet STARS criteria for a sustainable enterprise.

Recommendation: SJSU has two activities that involve student enterprise and come close to meeting STARS criteria. It is recommended that SJSU use these two activities to meet STARS criteria through the following actions:

The Spartan Smart Cart aims to increase access to fresh produce at SJSU and coordinates the CSA program on campus. Although this enterprise meets most of the STARS requirements for this credit, it does not include sustainability as part of its mission statement.

Another activity that promotes student enterprise on campus is the Neat Ideas Fair hosted by the School of Business. This fair is an annual forum and competition for business innovation. However, sustainability is not a specific focus of this event.

Resources:
Sustainable Enterprise Campus Examples: Appendix 7

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Co-Curricular Education Tier Two Credit 6: Sustainability Events

Credit Criteria: This credit recognizes institutions that hold major events related to sustainability, such as conferences, speaker series, or symposia, which have students as the intended audience.

Assessment:
There are multiple events which satisfy criteria for this credit, many of which occur during SJSU’s annual Sustainability Week in April. This is a week-long series of events directed at the student population including speakers, symposia, tours, and documentary showings. Some examples of sustainability events at SJSU are listed here:

- Green Talk Series, College of Engineering (Wednesdays, ongoing)
- Sustainability Matters Series, Sustainability Office and Environmental Resource Center (ongoing)
- Debate on Proposition 32 (10/20/10)
- How Climate Change is Reshaping the Coast and Our Energy Future (11/16/10)
- GROWin’ and Savin’ Water Too (12/1/10)
- GreenWave Speakers 2/18/11 (2/25/11)
- Spartapalooza Wellness Festival (3/6/11)

Co-Curricular Education Tier Two Credit 7: Outdoors Program

Credit Criteria: This credit recognizes wilderness or outdoors programs that organize hiking, backpacking, kayaking, or other outings for students and follow Leave No Trace principles.

Credit Calculation:

- SJSU meets the criteria for full points for this credit with the Outdoor Adventures program.

Assessment:

Outdoor Adventures, run by Associated Students Campus Recreation (ASCR) provides day and overnight outdoor activities for San José State University students, faculty, and staff. Events are offered throughout the year for all levels of participants. Recent events include day hiking trips, volunteer days, kayaking, rafting, backpacking, and climbing. The events follow ecological principles to maintain ecological systems while enjoying the outdoors.
Resources:
SJSU Outdoor Adventures Web Site: http://as.sjsu.edu/ascr/index.jsp?val=fit_advent

Co-Curricular Education Tier Two Credit 8:
Themed Semester or Year

Credit Criteria: This credit recognizes institutions that have chosen a sustainability-related theme for its themed semester, year, or first-year experience during the past three years.

Assessment:
SJSU currently does not have a themed semester or year and therefore does not meet STARS criteria for this credit.

Recommendation:
A semester or year with a sustainability theme serves many purposes. It can provide all students with a set of similar learning objectives, give students a sense of a shared learning experience, and give basic sustainability knowledge to all students. This is often accomplished through a required book reading of all incoming students, with curricular components to accompany the reading. For example, Cal Poly Pomona requires that all incoming students read The Story of Stuff by Annie Leonard. Students are also required to participate in an art gallery and essay contest about the book. At the University of Colorado Springs, colleges within the university select a theme each year. For the 2011/2012 academic year, this theme is Sustainability and Community, and No Impact Man was the themed book. Finally, Portland State University has first-year experience called Freshman Inquiry in which students select curriculum from one of eight themes. One of these themes is Sustainability.

Resources:
Cal Poly Pomona Themed Semester: http://www.csupomona.edu/~academic/fye/StoriesHome.shtml
Portland State University Freshman Inquiry: http://www.pdx.edu/unst/freshman-inquiry-sustainability

Curriculum Credits

This category recognizes institutions that have formal education programs and courses addressing sustainability. One of the primary functions of colleges and universities is to educate students. By training and educating future leaders, scholars, workers, and professionals, higher education institutions are uniquely positioned to prepare students to understand and address sustainability challenges. Institutions that offer courses covering sustainability issues help equip their students to lead society to a sustainable future.
ER Credit 5: Sustainability Course Identification

Credit Criteria: This credit recognizes institutions that have identified their sustainability course offerings and share that information with their campus communities. Conducting an inventory of academic offerings provides a foundation for advancing sustainability curriculum, a baseline for understanding current offerings, and helps current and prospective students find and understand sustainability course offerings. This credit is organized into three parts, and institutions earn one point for each.

Credit Calculation:

- SJSU has an agreed-upon definition of sustainability in curriculum – 1 point earned
- SJSU has identified its sustainability-focused and -related courses – 1 point earned
- This list is available online to the public – 1 point earned

Assessment:

The following working definition of sustainability in curriculum at SJSU was developed and used by Dr. Halualani in Communication Studies in 2009 in consultation with Katherine Cushing in Environmental Studies to identify an initial list of sustainability courses. This definition has been used in subsequent rounds of course identification, as described below.

“Sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own needs. Operationally, sustainability concurrently addresses the ‘Three E’s’: Environmental Protection and Enhancement, Economic Development, and Social Equity.” A course is ‘sustainability-focused’ if half or more of the curriculum focuses on two or more of the Three E’s. A course is ‘sustainability-related’ if 10% or more of the curriculum or a significant curricular module focuses on two or more of the Three E’s.

SJSU Sustainability Faculty-in-Residence used this definition in the spring semester of 2010 to update the original list created by Halualani. During preparation of this report, this listed was vetted, updated, and finalized using a review of course green sheets, online information, and interviews with Sustainability Faculty-in-Residence. The final list of sustainability-related and -focused courses is available on the SJSU sustainability website.

Recommendation:

The process of attaining information on sustainability courses at SJSU could be more easily accomplished and accurate if instructor-level information were obtained rather than relying on information from University Sustainability Board members. This could be done by setting up a system in which department administrative staff collects information from instructors on whether courses fit a set of criteria based on the definition above. Instructors would self-report to department administrative staff, who would then send information to the Sustainability Board. While potentially difficult to initiate, this system would be quite efficient once launched and would further help establish sustainability education as a campus priority. While not costly to implement, the feasibility of this approach would depend on a
buy-in from department chairs and the UCCD, the willingness of department administrators, and a clear set of instructions. If implemented in conjunction with a ‘Sustainability Across the Curriculum’ workshop (see ER 14), this approach could result in more sustainability courses being offered and an enhanced communication network for sustainability courses.

Another option, which has been implemented by Chico State University, is to make an official ‘sustainability course’ designation in a similar manner to a GE designation. Chico State University has integrated this designation into the process for new course approval.

Resources:
List of Sustainability Courses at SJSU: http://www.sjsu.edu/sustainability/academics/

ER Credit 6: Sustainability-Focused Courses

Credit Criteria: This credit recognizes institutions that offer academic courses focused on sustainability. Sustainability-focused courses provide valuable grounding in the concepts and principles of sustainability. These courses educate students about how different dimensions of sustainability relate to and support each other in theory and practice. Institutions earn the maximum 10 points when 10% of all courses offered are sustainability-focused. To calculate partial points, the percent of sustainability-focused courses is multiplied by a calculation factor of 100.

Credit Calculation:
- SJSU has 159 sustainability-focused courses in the course catalog, accounting for cross listings
- Academic Year 2010/2011 number of sections offered: 9,371
- Academic Year 2010/2011 number of sections of sustainability-focused courses: 291
- Calculation: 100 x 291 ÷ 9,371 = 3 points earned

Assessment:
Using the list of sustainability-focused courses developed for ER 5, information on when and if courses were offered was obtained through a series of queries generated by the SJSU Office of Institutional Research. The analysis covered the past five academic years. This sum was divided by the total number of sections offered at SJSU in each academic year. The complete methodology and spreadsheets showing this information can be found in Appendix 9. The final ER6 score for SJSU is based on the 2010/2011 academic year, not including summer session. Over the past five academic years, there has been a very slight increase in the percent of sections offered at SJSU that were sustainability-focused (Table 1).

| Table 1. Number and Percent of Sustainability-Focused and -Related Courses at SJSU, 2006-2011 |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Sustainability-Focused Sections               | 291       | 263       | 293       | 263       | 263       |
| Sustainability-Related Sections               | 319       | 30/       | 336       | 30/       | 30/       |
| SJSU Total Sections                           | 9371      | 9406      | 10199     | 9968      | 9506      |
| Percent Sustainability-Focused                | 3.11%     | 2.80%     | 2.87%     | 2.64%     | 2.77%     |
| Percent Sustainability-Related                | 3.40%     | 3.26%     | 3.29%     | 3.08%     | 3.23%     |
Recommendation:
Recommendations for enhancing sustainability-focused course offerings can be found in ER14 below.

Appendix:
See appendix for List of Sustainability Focused and Related Courses by Semester
See appendix for detailed process used to count sustainability-focused sections

ER Credit 7: Sustainability-Related Courses

Credit Criteria: This credit recognizes institutions that offer academic courses related to sustainability. Sustainability-related courses help build knowledge about a component of sustainability, introduce students to sustainability concepts during part of the course, or broaden students’ understanding of sustainability from within different disciplines. Institutions earn the maximum 10 points when 30% of all courses offered are sustainability-focused. To calculate partial points, the percent of sustainability-focused courses is multiplied by a calculation factor of 33.3.

Credit Calculation:
- SJSU has 169 sustainability-related courses in the course catalog, accounting for cross listings
- Academic Year 2010/2011 number of sections offered: 9,371
- Academic Year 2010/2011 number of sections of sustainability-related courses: 319
- Calculation: \(33.3 \times 319 = 1.1\) points earned

Assessment:
Using the list of sustainability-focused courses developed for ER 5, the percentage of sustainability-related classes was computed using the same methodology applied to sustainability-related classes. The complete methodology and spreadsheets showing this information can be found in Appendix 9. Over the past five academic years, there has been a very slight increase in the percent of sections offered at SJSU that were sustainability-focused (Table 1 above).

Recommendation:
Recommendations for enhancing sustainability-focused course offerings can be found in ER14.

Resources:
See Appendix for List of Sustainability Focused and Related Courses by Semester
See Appendix for Detailed process used to count sustainability-focused sections

ER Credit 8: Sustainability Courses by Department

Credit Criteria: This credit recognizes institutions whose academic departments offer sustainability courses. Having sustainability courses offered by numerous departments helps ensure that the institution’s approach to sustainability education is comprehensive and includes diverse topics. Offering

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>7</td>
</tr>
</tbody>
</table>
sustainability courses in numerous departments can increase student exposure to sustainability topics and themes. Institutions earn the maximum of 7 points for this credit when 90 percent or more of academic departments offer at least one sustainability-related or -focused course. To calculate partial points, the percent of sustainability-focused courses is multiplied by a calculation factor of 7.78.

Credit Calculation:
- SJSU number of departments: 62
- SJSU number of departments offering at least one sustainability course: 40
- Calculations: 7.78 x 40 ÷ 62 = 5 points earned

Assessment:
Using the list of sustainability courses from ER6 and ER7, each SJSU department with at least one sustainability-focused or -related course was included in the count. The university has an excellent spread of sustainability courses across the campus. All academic colleges are represented in the count, and most colleges have a majority of departments offering at least one sustainability-focused or -related course. This means that the large majority of students at SJSU have access to sustainability education within their major. In addition to having sustainability courses in traditionally environmentally oriented departments such as Environmental Studies or Biology, sustainability courses can be found in departments as diverse as Hospitality, Recreation and Tourism Management, Organization and Management, and Product Design.

Recommendation:
Recommendations for enhancing sustainability-focused course offerings can be found in ER14.

Appendix:
See Appendix for list of departments offering sustainability courses: Appendix 10

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**ER Credit 9: Sustainability Learning Outcomes**

Credit Criteria: This credit recognizes institutions with sustainability learning outcomes that are associated with program degrees and/or courses of study. Learning outcomes help students develop specific sustainability knowledge and skills, and provide institutions with goals against which to assess learning. Institutions earn the maximum of 10 points for this credit when all students graduate from programs that have adopted at least one sustainability learning outcome.

Credit Calculation:
- Academic Year 2009/2010 total SJSU students receiving a bachelors or masters degree: 7,804
- Academic Year 2009/2010 SJSU students receiving a bachelors or masters degree from a program with an identified sustainability learning outcome: 3,223
- Calculation: 10 x 3,223 ÷ 7,804 = **4.1 points earned**
Assessment:
Using the complete list of SJSU degree programs, all bachelors or masters program with an identified sustainability learning outcome were catalogued. A degree program with an identified sustainability learning outcome was defined as one with either (1) a learning outcome pertaining to sustainability listed in the SJSU Program Assessment, or (2) a sustainability-focused or -related course that is required in order to graduate from the degree program. Using this list, the number of students graduating from these programs was obtained with the help of the SJSU Office of Institutional Research. The Office of Institutional Research does not collect information on numbers of graduates from minors, concentrations, certificates, or credentials, so this information could not be included in the analysis. Therefore the actual point total for SJSU could be higher. The complete methodology and spreadsheets showing this information can be found in Appendix 11. Over the past five academic years, this number has stayed nearly constant (Table 2). In all, there are 52 SJSU degree programs in 27 departments that have an identified sustainability learning outcome. These include a diverse array of departments, such as Philosophy, Nursing, Materials Engineering, Chemistry, and Accounting/Finance.

Table 2. Number & Percent of SJSU Students Graduating from Degree Program with Sustainability Learning Outcome, 2006-2011

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Graduating from Program with Sustainability Learning Outcome</td>
<td>1,389</td>
<td>3,223</td>
<td>2,976</td>
<td>2,860</td>
<td>2,561</td>
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<tr>
<td>Total Graduating from SJSU</td>
<td>3,359</td>
<td>7,804</td>
<td>7,498</td>
<td>7,257</td>
<td>6,355</td>
</tr>
<tr>
<td>Percent Graduating from Program with Sustainability Learning Outcome</td>
<td>41.4%</td>
<td>41.3%</td>
<td>39.7%</td>
<td>39.4%</td>
<td>40.3%</td>
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<td>ER 9 STARS Points</td>
<td>4.1</td>
<td>4.1</td>
<td>4.0</td>
<td>3.9</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Resources:

Appendix:
See Appendix for Detailed process used to count sustainability-related sections
See Appendix for Information on graduates by degree program

ER Credit 10: Undergraduate Program in Sustainability

Credit Criteria: This credit recognizes institutions that have formal, undergraduate-level degree programs focused on sustainability. Developing such programs signals an institution’s commitment to sustainability. Such programs also provide a path for students to study sustainability topics in academic programs and provide a home for sustainability scholars within the institution.

Credit Calculation:
- SJSU meets the full points for this credit with their three Environmental Studies undergraduate degrees.
Assessment:
SJSU offers three Environmental Studies Undergraduate degrees: a Bachelor of Science, a Bachelor of Arts degree, and a Bachelor of Arts degree in preparation for teaching. These programs provide students with a foundation in the natural and social sciences most relevant to sustainability. Programs are based on the concept of sustainability – balancing environmental, social, and economic issues for the overall benefit of people and the planet. All Environmental Studies degrees provide students with an interdisciplinary background in issues ranging from environmental ethics to endangered species.

In addition, SJSU has several other undergraduate programs that contain a significant sustainability component including Civil Engineering, Biological Sciences, and Meteorology (see full list in Appendix 12). While these do not qualify under the criteria of this credit because they are not specifically focused on sustainability, they do further demonstrate the opportunities for sustainability education at SJSU.

Resources:
Environmental Studies degree descriptions: http://www.sjsu.edu/depts/EnvStudies/undergrad/index.htm

Appendix:
See Appendix for list of SJSU degree programs related to sustainability

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ER Credit 11: Graduate Program in Sustainability

Credit Criteria: This credit recognizes institutions that have formal, graduate academic degree programs focused on sustainability. Developing such programs signals an institution’s commitment to sustainability. Formal academic programs focused on sustainability provide a path for students to study sustainability topics in depth, thus better preparing them to address sustainability challenges. Formal academic programs also provide a home for sustainability scholars within the institution.

Credit Calculation:
- SJSU meets the full points for this credit with their Master of Science in Environmental Studies program.

Assessment:
SJSU offers an Environmental Studies Master’s Program that trains independent environmental professionals in the broadly interdisciplinary analytical skills necessary to solve environmental problems. Throughout the graduate program, students receive skills in communication and critical inquiry through fieldwork, data analysis, manuscript preparation, presentations within graduate seminars and departmental colloquiums, and interaction at professional meetings. Global perspectives (as well as local viewpoints) are integrated in all course work, and graduates are encouraged to serve their society by going through their graduate internship program and carrying out thesis research that addresses the needs of city, state, national, and international agencies.
In addition, SJSU has several other graduate degree programs that contain a significant sustainability component, such as Marine Sciences and Urban Planning (see full list in Appendix 12). While these do not qualify under the criteria of this credit because they are not specifically focused on sustainability, they do further demonstrate the opportunities for sustainability education at SJSU.

Resources:
Environmental Studies degree descriptions: http://www.sjsu.edu/depts/EnvStudies/grad/index.htm

Appendix:
See Appendix for list of SJSU degree programs related to sustainability

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**ER Credit 12: Sustainability Immersive Experience**

**Credit Criteria:** This credit recognizes institutions that offer sustainability-focused immersive experience programs. Such programs give students the opportunity to witness and learn in-depth about sustainability challenges and solutions. These programs provide a memorable way for students to deepen and expand their knowledge of sustainability.

**Credit Calculation:**
- SJSU received the full points for this credit for their study abroad program in Guatemala.

**Assessment:**
Until the 2010-2011 academic year, SJSU’s Department of Biological Sciences offered a study abroad program in the Amazon rain forest. SJSU undergraduate students enrolled in Field Studies in Biology and graduate students enrolled in Seminar in Advanced Biology: Organismal Biology. In this program students live in the capital of the Amazonian State, Manaus, and go on daily field trips. Sustainability was an important focus with this program, as students studied global climate change and social-economic issues involved in preserving the rain forest ecosystem.

While this program is not being offered in the coming academic year, another study abroad program with a sustainability focus also qualifies for this credit: Professor Kathryn Davis in the Department of Geography runs a three-week immersive study abroad program in Guatemala with a focus on sustainability.

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**ER Credit 13: Sustainability Literacy Assessment**

**Credit Criteria:** This credit recognizes institutions that are assessing the sustainability literacy of their students. Such an assessment helps institutions evaluate the success of their sustainability education initiatives and develop insight into how these initiatives could be improved.

**Credit Calculation:**
- 0 Points Earned
- 2 Points Possible
Assessment:
- SJSU currently does not conduct an assessment of the sustainability literacy of its students – 0 points earned
- SJSU does not conduct any follow-up assessment – 0 points earned

Recommendation:
It is recommended that SJSU, in collaboration with the University Sustainability Board, create and distribute a sustainability literacy assessment and do a follow up assessment of the same cohort. This will be an important step in understanding how to more broadly integrate sustainability into the campus learning experience. The survey tool should both assess student knowledge as well as student access to sustainability information and practices, and it could be implemented during new student orientation (pre) and with course evaluations at the end of the academic year (post). Included in appendices are an example assessment and the process used by another university to develop their assessment.

Appendix:
See Appendix for American University Sustainability Literacy Assessment
See Appendix for Northern Iowa University Literacy Assessment Process

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**ER Credit 14: Incentives for Developing Sustainability Courses**

**Credit Criteria:** This credit recognizes institutions that offer incentives to help faculty expand sustainability course offerings. Providing release time, funding for professional development, trainings, and other incentives can help faculty broaden and deepen sustainability curriculum. Faculty often needs these incentives to determine how best to include sustainability in their courses. Providing such incentives lends institutional support to increased sustainability course offerings.

**Assessment:**
- SJSU does not have any incentives for developing sustainability courses – 0 points earned

**Recommendation:**
AASHE recognizes that integrating sustainability broadly into university curriculum requires faculty and instructors to take an active role in incorporating readings, assignments, and lectures that incorporate sustainability aspects of course topics. There are many approaches to encourage this type of curricular innovation, and universities that have achieved points for this credit have a broad range of incentives for the development of sustainability curriculum.

A low-cost way to foster this innovation in curriculum is through a ‘Sustainability in the Curriculum’ workshop, which gives faculty guidance in incorporating sustainability into curriculum. These workshops can be short periodic sessions or multi-day seminars. Some universities offer incentives or funds to attend the workshop, while others offer larger incentives to instructors to develop curriculum following the workshop.

A more comprehensive approach to developing SJSU’s sustainability curriculum is creating an opportunity for stipends and/or partial teaching releases to develop sustainability curriculum. When this
approach is cost prohibitive on a large scale, it can still be used on a small scale to fund one or two faculty members to lead campus efforts.

Resources:
Santa Clara University’s Sustainability Across the Curriculum program:
http://www.scu.edu/sustainability/education/pennon.cfm

Research Credits

This category seeks to recognize institutions that are conducting research related to or focused on sustainability. Conducting research is a major function of many colleges and universities. By researching sustainability issues and refining theories and concepts, higher education institutions can continue to help the world understand sustainability challenges and develop new technologies, strategies, and approaches to address those challenges.

14.4 out of 27 possible points were earned in this category

ER Credit 15: Sustainability Research Identification

Credit Criteria: This credit recognizes institutions that have identified their sustainability research and associated faculty scholarship and creative inquiry. Conducting an inventory of an institution’s sustainability research can serve as a valuable first step in identifying strengths and areas for development. Institutions earn one point for each of three parts: developing a definition of sustainability research, identifying a list of sustainability research activities and initiatives, and making this inventory publicly available online.

Credit Calculation:

- SJSU has an agreed-upon definition of sustainability research – 1 point earned
- SJSU has done an inventory of sustainability research activities - 1 point earned
- This inventory is available online to the public - 1 point earned

Assessment:

The following working definition of sustainability in curriculum at SJSU was developed during the implementation of the STARS Assessment. An initial draft was written by a group of three SJSU faculty, which was then circulated to SJSU Sustainability Board Members for revisions and feedback. The final definition is as follows:

“Sustainability research focuses on one or more of the following aspects of sustainability: ecological integrity, economic prosperity, and social and intergenerational equity. It addresses a sustainability challenge (such as climate change or poverty) and furthers our understanding of the interconnectedness of societal, economic, and environmental issues. Sustainability research promotes culturally appropriate solutions that concurrently support economic prosperity, social well-being, and ecological vitality.”

This definition was used to inventory faculty at SJSU involved in research related to sustainability, and this list has been made public via the SJSU Sustainability website. Since information on research foci is
not readily available campus-wide, the inventory was conducted using multiple data collection methods. First, an original list created by Halaulani in 2008 of faculty involved in sustainability research was fully reviewed using faculty information available on department and personal websites. Second, this list was then circulated to Sustainability Faculty-in-Residence for comments, additions, or deletions. Third, lists of faculty affiliated with research centers at SJSU, including Moss Landing Marine Laboratories and the Mineta Transportation Institute, were reviewed for potential faculty to include. Fourth, the SJSU Experts database was reviewed using multiple keywords related to sustainability for potential inclusion of additional faculty. Finally, annual reports from the SJSU Research Foundation from the past three years were reviewed for projects and the faculty involved in them. None of these steps alone were sufficient to find all faculty to be included in the list, and so subsequent STARS Assessment should use these same methods unless the process becomes more institutionalized.

**Recommendation:**
The process of attaining information on faculty involved in sustainability research at SJSU could be more easily accomplished and the data more accurate if faculty-level information were obtained rather than relying on information from Sustainability Faculty-in-Residence, webpages, and research grant reports. Unfortunately, this multi-method approach is used at nearly all STARS reporting institutions, since this information is never fully centralized. Therefore, the process of updating this list will depend on refining the methods described above.

**Resources:**
SJSU Experts Database: [http://experts.sjsu.edu/](http://experts.sjsu.edu/)
Moss Landing Marine Laboratories: [http://www.mlml.calstate.edu/](http://www.mlml.calstate.edu/)
Mineta Transportation Institute: [http://transweb.sjsu.edu/](http://transweb.sjsu.edu/)

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**ER Credit 16: Faculty Involved in Sustainability Research**

**Credit Criteria:** This credit recognizes institutions where faculty members are conducting research on sustainability topics. The percentage of faculty members engaged in sustainability research is a measure of the spread of sustainability research. Institutions earn the maximum of 10 points for this credit when 25 percent or more of faculty are engaged in sustainability research. To calculate partial points, the percent of faculty involved in research related to sustainability is multiplied by a calculation factor of 40.

**Credit Calculation:**
- Academic year 2010/2011 ladder rank faculty: 633
- Academic year 2010/2011 ladder rank faculty involved in sustainability research: 115
- Calculation: 40 x 115 ÷ 633 = 7.3 points earned
**Assessment:**
Using the inventory described in ER15, the total number of faculty involved in research related to sustainability was totaled. The inventory included some adjunct faculty, lecturers, and emeritus faculty; however, these were not included in the total count of 115. The total current number of tenure and tenure-track faculty at SJSU in 2010/2011 (633), excluding lecturers and adjunct faculty, was attained using the Office of Institutional Research Faculty Quick Facts page.

**Recommendation:**
See ER18 and ER19 for recommendations on increasing the number of faculty involved in research related to sustainability at SJSU.

**Resources:**
Office of Institutional Research Faculty Quick Facts: [http://oir.sjsu.edu/Faculty/](http://oir.sjsu.edu/Faculty/)

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**ER Credit 17: Departments Involved in Sustainability Research**

**Credit Criteria:** This credit recognizes institutions where sustainability research is being conducted in many departments. Since sustainability transcends traditional academic divisions, having multiple departments involved in research indicates that the institution has a broad perspective on sustainability and can help ensure that multiple perspectives are considered. Institutions earn the maximum of 6 points for this credit when 75 percent or more of departments are engaged in sustainability research. To calculate partial points, the percent of departments involved in sustainability research is multiplied by a calculation factor of 8.

**Credit Calculation:**
- SJSU number of departments: 62
- SJSU number of departments involved in sustainability research: 32
- Calculations: \( 8 \times 32 ÷ 62 = 4.1 \) points earned

<table>
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<th>Points Earned</th>
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</tr>
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<tbody>
<tr>
<td>Points Possible</td>
<td>6</td>
</tr>
</tbody>
</table>

**Assessment:**
Using the list of faculty from ER15 and their department affiliation, each SJSU department with at least one faculty member involved in research related to sustainability was included in the count.

**Recommendation:**
See ER18 and ER19 for recommendations on increasing the departments with faculty involved in research related to sustainability at SJSU.
Appendix:
See Appendix for List of departments with faculty involved in sustainability research activities

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ER Credit 18: Sustainability Research Incentives

Credit Criteria: This credit recognizes institutions that have programs in place to encourage students and faculty members to research sustainability. Providing incentives demonstrates that sustainability is an institutional priority and can help deepen students' understanding of sustainability issues and attract new researchers to the field. There are two parts in this credit. Institutions earn three points for incentives for student sustainability research, and three points for incentives for faculty sustainability research.

Assessment:  
- SJSU currently does not have any incentives for student or faculty sustainability research – 0 points earned

Recommendation:  
Expanding sustainability research into many departments at SJSU will be a long-term process. Research related to sustainability is relevant to most campus departments, but incentives are necessary to demonstrate campus commitment and develop interest among students and faculty. Other STARS-rated universities that have received points for this credit have either external institutes that provide research funds, campus-wide funds or institutes and/or individual departments that award sustainability research funds, campus sustainability funds that support projects or research. There is broad variation in the types of programs available at other universities, as well as in funding levels provided. Clearly, it is a costly endeavor to build a research incentive program. However, campuses often find that donors are drawn to give to innovative projects that support sustainability. So the creation of a sustainability research incentive program, either for students or faculty, can be seen as a means to garner additional donor funds. High-level administrative support for the faculty-led effort to create a sustainability training and research institute would help accelerate incentive development. By providing enhanced opportunities for faculty to engage in sustainability research and supporting the sustainability needs of local municipalities and businesses, the training and research institute has high potential to promote scholarly research as well as serve practical needs in areas such as sustainability program manager training, ecological restoration, and climate change planning and adaptation.

Resources:  
The John T. Lyle Center for Regenerative Studies at Cal Poly Pomona offers a model for this type of program: [http://www.csupomona.edu/~crs/index.html](http://www.csupomona.edu/~crs/index.html)
ER Credit 19: Interdisciplinary Research in Tenure and Promotion

Credit Criteria: This credit recognizes institutions that acknowledge interdisciplinary, trans-disciplinary, and multi-disciplinary research during faculty promotion and tenure decisions. Giving interdisciplinary research equal weight as research from a single academic discipline provides an important foundation that allows faculty to pursue sustainability related research, and institutions that give positive recognition to interdisciplinary, trans-disciplinary, and multi-disciplinary research during faculty promotion and tenure decisions earn 2 points for doing so.

Assessment:
- SJSU tenure and promotion guidelines currently do not meet the criteria of recognizing interdisciplinary research – 0 points earned

Recommendation:
Most universities that earned these points received them on the basis of having tenure and promotion guidelines that specifically address interdisciplinary research. Other universities encourage regular participation in interdisciplinary and multidisciplinary research and use it in their evaluation and promotion decisions. Some universities differentiated having either university-wide or department-specific guidelines. The language used in these guidelines is not necessarily very complex, nor does it drastically alter general university practices around tenure and promotion. However, they do specifically state the value of interdisciplinary research and thus affirm the university’s commitment to it. This is a low-cost activity that would clearly demonstrate the value SJSU places on interdisciplinary research.

Appendix:
See Appendix for examples of tenure and promotion guidelines from multiple universities on interdisciplinary research
Section 2: OPERATIONS

### Operations Highlight

**Sustainable Transportation**

STARS transportation credits seek to recognize institutions that are moving toward sustainable transportation systems, and to provide a framework for ways in which an institution may develop policies and programs to both reduce greenhouse gases related to transportation as well as to promote alternative methods of commuting to and from campus. Credit goals focus on reducing single occupant vehicle trips to and from the campus and their associated pollutants, promote alternative means of commuting for both students and staff, and mitigate the pollutants caused by campus related air travel.

Campus related transportation can be a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer. In addition, the extraction, production, and global distribution of fuels for transportation can damage environmentally
and/or culturally significant ecosystems. For most colleges that track their GHG emissions, transportation can account for 1/3 to ½ of their totals, indicating that this emission category requires focused attention and strong policies if the institutional goal is to move towards carbon neutrality.

Campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage stormwater and greatly reduces community congestion. A campus can also realize substantial cost savings by avoiding the building of new parking structures and related parking costs. A significant budget is usually associated with campus parking, but promoting alternative transporting means can be much less expensive for the campus as well as a real benefit to help mitigate rising student fees.

San José State University scored well in alternative transportation, receiving 6.2 out of 12 possible points in this sub category. Highlights include:

- 54% of the campus fleet is made up of electric vehicles.
- 59% of all students use alternative transportation to commute to and from campus.
- The campus has an excellent annual transportation survey with accurate transportation data.
- 49% of all employees use alternative transportation.
- There are many secure locations on campus to store bicycles.
- The campus provides several forms of reduced price or free access to alternative and public transportation.
- Most employees are provided opportunities to participate in condensed work weeks and some types of job descriptions allow telecommuting when possible.
- The Campus provides a carpool match program for both students and employees, provides van pools from several commuting destinations, and offers reduced parking fees and preferred parking for carpools.

### Student Commute Modal Split:

<table>
<thead>
<tr>
<th>% of students who drive alone to campus:</th>
<th>41.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of students who walk, bike or use other non-motorized means:</td>
<td>16.0%</td>
</tr>
<tr>
<td>% of students who use campus shuttle or public transportation:</td>
<td>36.0%</td>
</tr>
<tr>
<td>% of students who use carpool/vanpool:</td>
<td>7.0%</td>
</tr>
<tr>
<td>TOTAL % Using Alternative Transportation:</td>
<td>59.0%</td>
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</tbody>
</table>

### Employee Commute Modal Split:

<table>
<thead>
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<th>% of employees who drive alone to campus:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>% of employees who walk, bike or use other non-motorized means:</td>
<td>20.4%</td>
</tr>
<tr>
<td>% of employees who use campus shuttle or public transportation:</td>
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</tr>
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<td>% of employees who use carpool/vanpool:</td>
<td>8.4%</td>
</tr>
<tr>
<td>TOTAL % Using Alternative Transportation:</td>
<td>48.9%</td>
</tr>
</tbody>
</table>
Recommendations from the STARS assessment include the following:

- Developing a comprehensive bike plan which should include analysis of storage size and locations around campus and a bike sharing program.
- Adopting a “No Idling” policy.
- Consideration of a “Cash-out” plan to pay commuters not to drive to work.
- Developing a “Zip-Car” program that provides some means of limited car use during the day for those that choose alternative transportation for the commute to and from the campus.

Buildings

This category seeks to recognize institutions that are taking steps to improve the sustainability performance of their buildings. Buildings are generally the largest user of energy and the largest source of greenhouse gas emissions on campuses. Buildings also use significant amounts of potable water. Institutions can design, build, and maintain buildings in ways that provide a safe and healthy indoor environment for inhabitants while simultaneously mitigating the buildings impact on the outdoor environment.

2.6 out of 13 possible points were earned in this category

OP Credit 1: Building Operations and Maintenance

Credit Criteria: This credit recognizes institutions that operate and maintain their buildings in ways that protect the health of building occupants and the environment. Points earned for having LEED Existing Buildings Operations & Maintenance certified buildings and/or buildings operated and maintained according to university mandated sustainable O&M guidelines.

Credit Calculation:
- Amount of Building Space within SJSU STARS Institution Boundary = 4,472,363 sf
- Amount of Building Space following sustainable O&M policies = 4,472,363 sf
- SJSU has no LEED EBOM certified building space

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>2.63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>7.0</td>
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</tbody>
</table>
Assessment:
All building space at SJSU is required to follow sustainable O&M practices mandated by Executive Order 987. Along with other sustainability policies, EO-987 provides sustainable building operations and maintenance guidelines for all CSU campuses. By following the provisions stated in EO-987, SJSU earns the minimum points for this credit. Higher points for this credit can be earned by having LEED EBOM certified building space on campus. SJSU is seeking EBOM Silver Certification for Dr. Martin Luther King Jr. Library later this year.

Recommendations:
While the existence of EO-987 provides the basis to earn points under this credit, there is no consistent approach to implementation of this mandate. For example, when we asked if low VOC materials had been installed on projects renovated under these guidelines, no specific list of approved low VOC materials or list of actual materials used was available. Additionally, each LEED project on campus is following its own set of credits that have not necessarily been coordinated with Campuswide operations and maintenance practices or with other LEED projects currently underway.

The USGBC has a Campuswide credit approach called AGMBC (Application Guide to Multi-building and Campus Projects). This guidance provides a streamlining approach to certifying numerous LEED BD&C projects on a campus, saving both design costs as well as certification costs. The guidance also includes LEED EBOM projects. For economies of scale as well as reduced planning and design costs related to LEED and the implementation of EO-987, we suggest fully coordinating all of these programs into the campus maintenance and design standards.

Resources:
SJSU Contact: Energy Analyst, FD&O
EO-987: http://www.calstate.edu/eo/OE-987.html
UC Merced Green Design Standards: http://lrdp.ucmerced.edu/2.asp?uc=1&lvl2=49&contentid=50

Appendix:
See Appendix for copy of EO_987
See Appendix for USGBC AGMBC Policy
OP Credit 2: Building Design and Construction

Credit Criteria: This credit recognizes institutions that have incorporated environmental features into their design and construction projects. Points are earned for having LEED New Construction, LEED Commercial Interiors and/or LEED for Core & Shell certified buildings (All under the Building, Design and Construction, or BD&C GBCI Programs). Points can also be earned for designing and building in accordance with green building guidelines and policies.

Credit Calculation:
- SJSU had no construction of new buildings within the past three years
- SJSU had 49,986 sf of major renovations within the past three years
- All renovated space within the last three years was designed and built according to sustainable policies – **1.5 points earned**

<table>
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<tr>
<th>STARS Factor</th>
<th>Bldg. SF</th>
<th>Total SQ FT New Construction + Renovations</th>
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<tr>
<td></td>
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<td>49,986</td>
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<td>Not Certified but follows Sustainable Policies</td>
<td>49,986</td>
<td>x 1.5</td>
<td>=</td>
</tr>
<tr>
<td>LEED BD&amp;C Certified</td>
<td>0</td>
<td>x 2.0</td>
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<td>LEED BDC Silver</td>
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<td>0</td>
<td>x 4.0</td>
<td>49,986</td>
</tr>
</tbody>
</table>

TOTAL Points 1.5

Assessment:
Two current design and construction projects at SJSU are being designed to LEED Silver standards at minimum. These are the Student Union Expansion and Renovation Project and the Student Health & Counseling Project. However, as these are under construction currently, they do not qualify for STARS credit until certified and/or completed. No other new construction projects have been completed within the past three years on SJSU.

Recommendations:
(See recommendations for OP BD Credit 1 above) SJSU has taken the first step by creating a written directive mandating LEED certification for new construction projects. Moving forward, all new construction eligible building space will qualify as constructed, designed and built according to green building guidelines. All LEED programs have complementary credits and approaches. Fully coordinating LEED BD&C projects with a master LEED credit list that is consistent across campus will save time and money for these projects and ensure they perform in a manner consistent with the EO-987 green maintenance requirements.

Resources:
(See OP BD credit 1 above)
SJSU Campus LEED Projects: [http://www.sjsu.edu/fdo/energy/sustainability/leed/](http://www.sjsu.edu/fdo/energy/sustainability/leed/)
OP Credit 3: Indoor Air Quality

Credit Criteria: This credit recognizes institutions that are working to protect the human health of building occupants by monitoring and protecting indoor air quality. Points earned for implementing an indoor air quality (IAQ) management policy, plan and/or practice that include regular auditing, monitoring, and a mechanism for occupants to register complaints.

Credit Calculation:

- **0 points earned** for having zero building space following a STARS compliant IAQ plan

<table>
<thead>
<tr>
<th>Bldg SF with IAQ Plan</th>
<th>STARS Factor</th>
<th>Total Bldg SF</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>x 2</td>
<td>4,472,363</td>
<td>0</td>
</tr>
</tbody>
</table>

Assessment:
SJSU does not have an IAQ plan that meets STARS criteria. CSU EO-987 addresses indoor air quality of buildings, but only in summary approach and does not meet the credit provisions for regular auditing, monitoring, and a mechanism for occupants to register complaints.

Recommendation:
In order to qualify for credits, SJSU must develop an institution specific IAQ plan that also includes provisions for regular auditing and provides a mechanism for occupants to register complaints. CSU Channel Islands used publication EPA 402-K-98-001 as a basis for developing a campus IAQ plan document. This EPA document provides suggestions on how to implement good IAQ practices within a building without increasing work or maintenance costs. Compliance with LEED EBOM guidelines and ASHRAE standards can also provide a basis for a building IAQ plan.

In addition, many campuses have an online work order system where campus users can register complaints and/or request work. This can be a mechanism used on campus for occupant to register indoor air quality needs.

Resources:
SJSU Contact: Energy Analyst, FD&O
EPA IAQ Webpage: [http://www.epa.gov/iaq/largeblgds/baq_page.htm](http://www.epa.gov/iaq/largeblgds/baq_page.htm)

Appendix:
See Appendix for UCSD IAQ Policy
Climate Credits

This category seeks to recognize the institutions that are measuring and reducing their greenhouse gas emissions. Global warming is expected to have myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are expected to be particularly pronounced for poor communities and countries.

2.0 out of 15 possible points were earned in this category

The following table illustrates the 3 scope categories of GHG emissions that are required for tracking under the American Colleges and University Presidents Climate Commitment (ACUPCC) reporting. Most US higher education institutions use these gridlines for GHG emissions tracking. The highlighted sections are the categories that SJSU tracks on an annual basis.

<table>
<thead>
<tr>
<th>Scope Category</th>
<th>Emissions Source</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>On Campus Stationary</td>
<td>Natural Gas purchased for water/pace heating/cooking</td>
</tr>
<tr>
<td></td>
<td>Direct Transportation</td>
<td>University Gasoline Fleet</td>
</tr>
<tr>
<td></td>
<td>Refrigerants &amp; Chemicals</td>
<td>Refrigerants used in HVAC, ice machines, etc.</td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
<td>Fertilizer Application</td>
</tr>
<tr>
<td>Scope 2</td>
<td>Electricity Purchased</td>
<td>Utility expenses of Electricity purchased</td>
</tr>
<tr>
<td>Scope 3</td>
<td>Faculty Staff Commuting</td>
<td>Daily trips to and from campus for work from survey</td>
</tr>
<tr>
<td></td>
<td>Student Commuting</td>
<td>Students commuting to the College</td>
</tr>
<tr>
<td></td>
<td>Directly Financed Air Travel</td>
<td>Faculty traveling for lectures and research</td>
</tr>
<tr>
<td></td>
<td>Study Abroad Air Travel</td>
<td>Air travel to and from Study Abroad Program</td>
</tr>
<tr>
<td></td>
<td>Solid Waste</td>
<td>Land filled waste</td>
</tr>
<tr>
<td></td>
<td>Wastewater</td>
<td>Treatment of wastewater generated by the campus</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>All types of paper purchased by College</td>
</tr>
</tbody>
</table>

OP Credit 4: Greenhouse Gas Emissions Inventory

Credit Criteria: This credit recognizes institutions that have inventoried their greenhouse gas emissions. Points earned for reporting on Scope 1, 2 and 3 emissions. Institution must also make the information publicly available.

Credit Calculation:
- 1 point earned for reporting Scope 1 and 2 GHG emissions online

San Jose State University STARS Report 2011
Davis Langdon, An AECOM Company
0 points earned for Scope 3 GHG emissions reporting

2005 reported numbers shown in the table below:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Scope 1: Cogen Natural Gas</th>
<th>Scope 1: Natural Gas</th>
<th>Scope 2: Non-Cogen Natural Gas</th>
<th>Scope 1: Purchased Power</th>
<th>Scope 1: Voyager Diesel</th>
<th>Scope 1: Voyager Gasoline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>27,597</td>
<td>3,790</td>
<td>9,100</td>
<td>8</td>
<td>196</td>
<td></td>
</tr>
</tbody>
</table>

**Assessment:**

SJSU reports Scope 1 and Scope 2 emissions for the CSU systems wide emissions; however, the emissions data was not collected consistently at the campus over the reporting periods (campus fleet emissions were collected with different parameters for several years). The CSU emissions measurement tool is one that has been developed specially within the CSU system. The information, compiled by each campus, can be accessed online. Aside from the CSU-wide inventory, SJSU does not formally catalog and report its GHG emissions online and the campus does not currently track or report Scope 3 emissions.

**Recommendation:**

SJSU is lacking a formal reporting system for GHG emissions. The data required to calculate GHG emissions is collected by the FD&O department at SJSU; however, the GHG emissions is not calculated and cataloged consistently year to year. Establishing a regular reporting method for GHG emissions will allow SJSU to evaluate their biggest contributors to GHG emissions and identify areas for reduction.

Most college campuses use the Clean Air – Cool Planet (CACP) emissions calculator to track their emissions, which is the standard reporting tool for ACUPCC institutions. SJSU can use the same data that they are required to collect for the CSU systems wide reporting and input into this calculator as well. The tool is free for all ACUPCC institutions. Using this standard, SJSU will be able to compare their data against other institutions outside the CSU systems that may be considered peers.

**Scope 3 Emissions:**

To fully understand and measure all emission associated with the campus life, SJSU must also track its Scope 3 emissions, which primarily include student and staff commuting and campus related air travel. The CACP emissions calculator noted above can also track these types of emissions. The Kyoto Protocol on climate emissions states that transportation associated with a business or institution is the responsibility of that particular entity and must be addressed along with other types of emissions. Typically, this category can account for 1/3 or more of a campus’ entire carbon footprint.

SJSU has an excellent alternative transportation program that has greatly reduced the emissions associated with single occupant commuter travel. Tracking Scope 3 emissions will help to determine the real impact of these efforts and provide specific information for targeting further efforts. Initiation associated air travel is also included in this category which is a set of emissions that SJSU does not currently track. Other campuses have found that mandatory travel offsets can be an inexpensive way to offset all air travel associated with a campus as the offset costs are low on a per ticket basis, typically $5 for domestic flights and $15 for international flights. Because these costs are borne by the individual.
research project or program requiring the air travel, they have not required a specific type of funding or budget allocation.

This graph represents Cal Poly Pomona GHG emissions tracking for 2005. Note the light blue area is Scope 3 Transportation associated emissions which are close to \(\frac{1}{2}\) of all the emission types on campus.

**Resources:**

SJSU Contact: Energy Analyst, FD&O  
Cal Poly Pomona Climate Commitment: [http://www.csupomona.edu/~climate/](http://www.csupomona.edu/~climate/)  
ACUPCC Climate Reporting Website: [http://rs.acupcc.org/](http://rs.acupcc.org/)

**Appendix:**

See Appendix for CSU GHG Reporting for SJSU 1990 – 2006 emissions  
See Appendix for full Cal Poly Pomona GHG Emissions Report

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**OP Credit 5: Greenhouse Gas Emissions Reduction**

**Credit Criteria:** This credit recognizes institutions that have reduced their net greenhouse gas (GHG) emissions compared to a 2005 baseline. Points earned are for reducing scope 1 and scope 2 emissions per weighted campus user. Full points are earned for achieving net zero GHG emissions.

**Credit Calculation:**

- 2005 GHG Emissions: 1.72 MT CO2 per person
- 2010 GHG Emissions: 1.60 MT CO2 per person
- Percent reduction: \((1.72 - 1.60) ÷ 1.72 = 0.0698 (7\%)\)
- Points calculation: \(0.0698 \times 14\) pts possible = **0.94 points earned**

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>14.0</td>
</tr>
</tbody>
</table>
Assessment:
The 2005 GHG emissions were compiled and reported for all Universities within the CSU system based on the CSU metrics and GHG emissions calculations which are typically not standard for other higher education institutions. In order to determine reduction in GHG emissions, SJSU compiled the scope 1 and 2 emissions for 2010 and compared between the two years. The comparison indicates an increase in GHG emissions due to increased campus fleet fuel usage and a significant decrease in the amount of purchased power by the University for an overall 7% decrease between the 2 reporting years.

The decreases are due primarily to two factors. One is reduction of purchased electricity by increasing the capacity of the cogeneration (non-renewable) energy that SJSU is generating on campus which has a lower emissions rate than purchased electricity. The second is the efforts that SJSU has taken to implement many energy saving programs over the last 5 years (see OP energy credits for a detailed list). These efforts have not only resulted in energy savings but they also impacted the total carbon footprint of the campus.

Recommendation:
The first and most important step in reducing the carbon footprint of the campus is to establish a Climate Action Plan (CAP) with specific emissions reductions goals. STARS addresses specific points for establishing a CAP, see PAE CP Credit 5 Climate Action Plan for further CAP recommendations.

Many institutions use graduate students to collect and produce a campus annual carbon report. Consider the Green Wave program for such efforts.

Resources:
SJSU Contact: Energy Analyst, FD&O
(See PAEc5 for resources related to CAPs)

Appendix:
See Appendix for table containing SJSU GHG Emissions data

Climate Tier Two Credits

Climate Tier Two Credit 1: Air Travel Emissions

Credit Criteria: Institution has policies and/or programs in place to reduce emissions from air travel.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.25</td>
</tr>
</tbody>
</table>

San Jose State University STARS Report 2011
Davis Langdon, An AECOM Company
Assessment:
SJSU does not have air travel emissions reduction policy in place nor does it track campus related air travel mileage and destination.

Recommendation:
First the campus must begin to require air travel reporting from all departments for campus related air travel. For most higher education intuitions, the largest air travel categories are research and study abroad programs, so collecting data from those types of programs is critical.

Most institutions purchase travel offsets to mitigate their air travel related emissions. Purchased air travel offsets are typically $5 for domestic flights and $15 for international flights. We suggest a policy that requires the purchase of offsets every time a ticket is purchased, distributing the cost to the specific program requiring travel and keeping the impact low.

Additionally, strong support and encouragement of telecommunications and use of other technology options can greatly reduce air travel needs.

Resources:
TerraPass: http://www.terrapass.com
United Airlines Carbon Office Program: http://www.united.com/page/article/0,6867,53032,00.html

Climate Tier Two Credit 2: Local Offsets Program

Credit Criteria: Institution has a local offsets program through which the institution offsets its GHG emissions by implementing projects that reduce GHG emissions in the local community.

Assessment:
SJSU does not have a local offsets program.

Recommendation:
This credit is not currently pursued by any STARS rated California Institution. Oregon State University implemented a program called the ‘Campus Carbon Challenge’ which worked with the local community to educate participants on how to change behaviors to reduce carbon emissions in their personal lives. SJSU can use an adaptation of their own Ecological Footprint Challenge to create a local offsets program within the local San José community.

Resources:
OSU Campus Carbon Challenge: http://oregonstate.edu/sustainability/carbon-challenge/about
Dining Services Credits

This category seeks to recognize institutions that are helping build a sustainable food system. Modern industrial food production often has deleterious environmental impacts. Pesticides and fertilizers used in agriculture can contaminate ground and surface water, which has potentially dangerous impacts on wildlife and human health. Furthermore, the often long distance transportation of food to institutions produces greenhouse gas emissions and other pollutions, as well as serious impacts on existing transportation infrastructure. Additionally, farmworkers are often exposed to dangerous pesticides. Institutions can use their food purchase to support their local economies, encourage safe, environmentally-friendly farming methods, and help alleviate negative impacts on farmworkers.

Please note that while dining services can also play an important role in conserving energy and water, reduction waste and purchasing environmentally preferable material other than food, STARS measure these impacts across the institutions instead of by department; therefore the benefits for these actions are captured in the Energy, Water, Waste and Purchasing subcategories, respectively.

2.6 out of 13 possible points were earned in this category

OP Credit 6: Food Purchasing

Credit Criteria: This credit recognizes institutions that are helping to build sustainable food systems through their food purchases. Points are earned based on percentage of total food purchases meeting criteria. Acceptable criteria for sustainable food purchases are:

- Grown and processed within 250 miles of the institution
- Third-party certified (USDA Certified Organic, Marine Stewardship Council, Blue Eco-label, Food Alliance or Fair Trade)
- Grown on a farm that operates as a cooperative, has a profit sharing policy for all employees, or has a social responsibility policy

Credit Calculation:

- Percentage Sustainable Food Purchase: 23.92%
- Points Calculation: 0.12 * 23.92% = 2.87 pts.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>2.87</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>6.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SJSU FOOD PURCHASING 04/2010 - 03/2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL SJSU FOOD PURCHASES</td>
</tr>
<tr>
<td>TOTAL LOCAL/ORGANIC FOOD PURCHASES</td>
</tr>
<tr>
<td>PERCENT PURCHASES LOCAL/ORGANIC:</td>
</tr>
</tbody>
</table>

Assessment:

Local Purchasing: SJSU is making great strides on local food purchasing, reporting almost 24% of its purchases from local sources. A review of the locations that are included within a 250 mile radius from
the campus include Redding at the Northern Central Valley down to Bakersfield in the southern end of the Central Valley. Most of the dairy production in the state occurs in the Central Valley so we can assume that all or almost all of the dairy products that SJSU consumes come from within the 250 radius. Currently, 93% of the milk purchases on campus are tracked as local; however, the remaining items purchased in the ‘Dairy’ category are not reported as local or organic. If all of the campus dairy products were reported as local, the overall percentage of sustainable purchases at SJSU would increase from 24% to 36%.

Meat production follows a similar pattern to dairy products. SJSU currently tracks local beef purchases from Marin Sun Farms. However, the majority of their beef purchases are from Sysco food service and 0% of the Sysco ‘Meat’ category purchases are tracked as local or organic. Dining Services should conduct a survey of all its vendors to determine if additional products can be categorized as local. Once that is complete, Dining Services can concentrate on the types of foods that are not produced locally and determine if purchasing options can be adjusted. In addition, organizations such as California Grown helps buyers identify sources for local food purchasing. Cal Poly Pomona currently uses California Grown wherever possible and currently has 60% sustainable purchases on their campus.

Certified, Cooperative and Socially Responsible Food Production: The campus does not track any of its food purchasing related to these categories, although it seems that some items offered on campus may fall into one of the 3rd party certified categories such as Fair Trade coffee. The campus should consider providing preference for these types of food categories when considering purchasing agreements from food providers.

Resources:
SJSU Contact: Director of Procurement & Budget Services, Spartan Shops, Inc.
Food Alliance Certified Foods: www.foodalliance.org
EcoLabel (Sustainable Seafood): www.msc.org/get-certified/use-the-msc-ecolabel
Bon Appetit (company supporting for sustainable food purchasing which Santa Clara University uses): http://www.bamco.com/sustainable-food-service
California Grown: www.californiagrown.org

Appendix:
See Appendix for full listing of SJSU Food Purchases
Dining Tier Two Credits

**Recommendation:** SJSU has gained every Tier Two credit available for campus dining. The campus should highlight all the sustainable dining practices in every food services location on campus. This effort is commendable and should be promoted as one of the greenest features of campus life. Consider noting the list of green dining features at the new student and employee orientations and then provide information on how each person on campus can help support the green dining efforts (make use of the reusable mug program, bring reusable utensils to campus rather than using the ones offered at the dining facilities, etc.).

**Dining Tier Two Credit 1: Trayless Dining**

**Credit Criteria:** Institution has a trayless dining program in which trays are removed from or not available in dining halls. The program may take the form of trays being eliminated permanently, being eliminated in some but not all cafeterias, or being removed during certain time periods.

**Assessment:**
Trayless dining was introduced in August 2009. This policy effects all residential dining (SJSU “Dining Commons”) including Southside Pizza, The Big Tuna, Don Lupe's Taqueria, The Uncommon Grill & Deli, FreshStart, Tully’s Coffee, Home Plate, Green Bamboo, Garden of Vegan, Farmer's Market, and Sweet Spot. Also included are Fourth Café, Village Market, and Just Below.

The only location on campus with small trays available is the food court which includes Panda Express, Subway, Jamba Juice, and the Market Café.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

**Dining Tier Two Credit 2: Vegan Dining**

**Credit Criteria:** Institution offers diverse, complete-protein vegan dining options during every meal. (On-site franchises, convenience stores, vending machines, and concessions are excluded).

**Assessment:**
SJSU Residential Dining offers vegan and vegetarian menu choices daily. In addition to various entrée's and sides a dedicated salad bar location within the Dining Commons offers only vegan items on a daily basis.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>
Dining Tier Two Credit 3: Trans-Fats

**Credit Criteria:** Institution uses frying oil that does not include trans-fats and seeks to avoid foods that include trans-fats in its dining operations. (On-site franchises, convenience stores, vending machines, and concessions are excluded from this credit).

**Assessment:**
Spartan shops purchases trans-fat free frying oil called Smartchoice Cottonseed/Canola Oil blend, which is used for all foods requiring oil. Spartan Shops uses trans-fat free salad oils. Spartan Shops also buys prepackaged foods that are trans-fat free. For example, the Otis Spunkmeyer cookies are trans-fat free. Purchasing of trans-fat free foods is mandated through purchasing policies from the food service office.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Dining Tier Two Credit 4: Guidelines for Franchises

**Credit Criteria:** Institution has adopted sustainability policies or guidelines for food service franchisees operating on campus. Sustainability guidelines or policies of the franchisees themselves do not count for this credit. The credit measures institutional engagement in guiding franchisees operating on campus toward sustainability.

**Assessment:**
Spartan Shops make their own franchisee agreements and operate the franchises on campus. Spartan Shops incorporated recycling and sustainability guides into their franchise agreements. For example, in their agreement with Panda Express, they have arranged to use biodegradable to-go containers in lieu of the typical Styrofoam containers.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Dining Tier Two Credit 5: Pre-Consumer Food Waste Composting

**Credit Criteria:** Institution has a pre-consumer food waste composting program.

**Assessment:**
Spartan Dining Services collects all pre-consumer food waste from its various food preparation locations. All pre-consumer food waste from our Dining Commons is collected in a compactor located at the dock of the Dining Commons Building. All pre-consumer food waste from our Student Union Food Court and the Just Below food court is collected in a compactor located at the dock of the Student Union building. The food waste is then collected by the GreenWaste Recovery, Inc. composting program. GreenWaste Recovery Inc takes the waste to their offsite facility (which is 30 miles away from campus) for resorting and composting.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>
Dining Tier Two Credit 6: Post-Consumer Food Waste Composting

Credit Criteria: Institution has a post-consumer food waste composting program.

Assessment:
Very similar to Spartan Dining's pre-consumer composting program, Spartan Dining Services collects all post-consumer food waste from its facilities and deposits it in containers serviced by GreenWaste Recovery, Inc. composting program.

Points Earned 0.25
Points Possible 0.25

Dining Tier Two Credit 7: Food Donation

Credit Criteria: Institution donates leftover or surplus food.

Assessment:
Spartan Dining Services has recently begun to provide surplus food donations to several different agencies through a program coordinated with Second Harvest Food Bank of Santa Clara County.

Points Earned 0.25
Points Possible 0.25

Dining Tier Two Credit 8: Recycled Content Napkins

Credit Criteria: Institution uses recycled content napkins in its dining service operations.

Assessment:
Spartan Dining Services provides unbleached napkins made from 100% recycled material. In addition, Spartan Dining Services utilizes dispensers which provide for only one napkin to be dispensed at a time.

Points Earned 0.25
Points Possible 0.25

Dining Tier Two Credit 9: Reusable Mug Discounts

Credit Criteria: Campus dining operations offers discounts to customers who use reusable mugs instead of disposable cups in to-go food service operations.

Assessment:
Spartan Dining Services offers a reusable mug discount in all its facilities on campus. Upon using your refillable mug, you are entitled to a $.50 discount for that item.

Points Earned 0.25
Points Possible 0.25
Dining Tier Two Credit 10: Reusable To-Go Containers Program

Credit Criteria: Campus dining operations provides reusable containers for to-go food; these containers are returned to dining operations for cleaning and re-use.

Assessment:
Spartan Dining Services provides reusable baskets, plates, and mugs which are returned, cleaned, and re-used by students in residence halls. As a result of this, to-go packaging purchases have been greatly reduced within the residence halls.

Dining Tier 2 Overall Summary: Spartan Shops meets all STARS criteria for Tier 2 Dining Services credits. As of Spring 2011, there is no other STARS certified Cal State institution that meets this criteria:

SJSU Spartan Shops has a website with general information:
http://www.spartanshops.com/dining/index_new.htm

However, all information relative to sustainability is posted on the Spartan Shops Sustainability Facebook page:
http://www.facebook.com/GreenSpartanShops

Energy Credits

This category seeks to recognize institutions that are reducing their energy consumption through conservation and efficiency, and switching to cleaner and renewable sources of energy such as solar, wind, geothermal, and low-impact hydropower. For most institutions, energy consumption is the largest source of greenhouse gas emissions, which cause global warming. Global warming is expected to have myriad negative impacts thought the world including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are expected to be particularly pronounced for poor communities and countries. In addition to causing global warming, energy generation from fossil fuels, especially coal, produces air pollutants such as sulfur dioxide, nitrogen oxides, mercury, dioxins, arsenic, cadmium, and lead. These pollutants contribute to acid rain as well as health problems such as heart and respiratory diseases and cancer. Coal mining and oil and gas drilling can also damage environmentally and/or culturally significant ecosystems. Nuclear power creates highly toxic and long-lasting radioactive waste. Large-scale hydropower floods habitat and disrupts fish migration.

Implementing conservation measures and switching to renewable sources of energy can help institutions save money and protect them from utility rate volatility. Renewable energy may be generated locally and
allow campuses to support local economic development. Furthermore, institutions can help shape markets by creating demand for cleaner, renewable sources of energy.

5.73 out of 15.6 possible points were earned in this category

**OP Credit 7: Building Energy Consumption**

**Credit Criteria:** This credit recognizes institutions that have reduced their energy usage per gross square foot of building space compared to a 2005 baseline.

**Credit Calculation:**
- 2005 Building energy use: 0.126 MMBtu / sf
- 2010 Building energy use: 0.095 MMBtu / sf
- Points Calculation: \[16 \times \frac{(0.126 - 0.095)}{0.126} = 3.99 \text{ points earned}\]

**Assessment:**
SJSU currently spends approximately $14,000,000 dollars on energy and water resources annually ($2,100,000 for purchased electricity and $3,600,000 for gas to power the campus cogen plant; the differential covers staff, Capital and Operating expenditures, and reserves). The campus energy reduction strategy to date has been to focus on building and system retrofits and monitoring based commissioning projects to reduce campus energy consumption. These projects have included lighting retrofits of most campus buildings, commissioning of the chiller plant, and decreasing pumping costs though improvements made to the campus differential temperature across the distribution system for chilled water. Additionally, SJSU has completed building commissioning on approximately 25% of building square footage (1,350,000 sf) to date. Over the last 5 years these efforts have resulted in a reduction of 9million kWh campus-wide, translating to approximately 1.7 million dollars in annual energy savings. The table below shows the energy usage decrease as a result of these efforts:

<table>
<thead>
<tr>
<th></th>
<th>Central Plant delivered (kWh)</th>
<th>Steam Delivered, Therms</th>
<th>CHW delivered, Ton-hrs</th>
<th>PG&amp;E Building gas, Therms</th>
<th>TOTAL MMBtu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FY 05/06</strong></td>
<td>49,971,687</td>
<td>1,623,987</td>
<td>6,188,918</td>
<td>398,299</td>
<td>447,049</td>
</tr>
<tr>
<td><strong>FY 09/10</strong></td>
<td>42,138,263</td>
<td>1,613,067</td>
<td>7,551,906</td>
<td>317,597</td>
<td>427,507</td>
</tr>
</tbody>
</table>

SJSU’s ongoing energy reduction strategies include continued building commissioning efforts and the installation of approximately 1 megawatt of solar panels to be installed on campus through a PPA agreement. Additionally, the campus currently has two new LEED projects in the design and construction phase which are both designed to reduce energy needs by more than 25% of code minimum, although this will add to overall campus energy consumption. The campus has one LEED EBOM project, MLK Library, which has reduced energy consumption by 57% of the code minimum.
**Recommendations:**

With the increase of new energy efficient square footage on campus combined with continuing the energy efficiency projects on campus, it is anticipated that points earned for this credit will increase in future STARS submissions. However, it can be assumed that future code mandated carbon reduction requirements as well as expected increases in utility rates will continue to put pressure on the campus to reduce overall energy consumption regardless of any growth in total square footage. If the campus cannot stay ahead of the expected energy reduction requirements, significant operating dollars may need to be redirected to mandated reduction projects, impacting other operational needs.

Energy reduction can be addressed with several strategies over the next few years. Below is a list of strategies that should be considered:

- Develop a comprehensive Energy Policy that sets specific reduction targets and dates for each building on campus. The Energy Policy should set criteria for renovation schedule based on programmatic needs of the campus and available funding.

- Continue with the current energy related projects such as building retro-commissioning, system upgrades, and lighting upgrades.

- Each energy related retrofit project should include the expansion of submetering for each building, separating lighting, plug load, major computing, and building systems to the greatest extent possible.

- Daylighting systems should be installed in every major building on campus to reduce both direct electrical loads and associated cooling loads.

- Within the audit period the campus has had great success in continued energy reduction by protecting savings realized from reduction projects rather than simply redirecting utility bill savings to other operation’s needs. Set a Life Cycle Cost Analysis requirement that increases as the fund increases over time, funding projects with short LCCA payback periods while the fund is lower and increasing to projects with longer LCCA payback periods as the fund increases. Any PPA solar project savings should be allocated to this fund also.

- Consider alternatives to the gas powered co generation system when it is replaced within the next 5 years. Bio-mass and geothermal supplement technologies are becoming mainstream and may lead to the avoidance of purchased electricity in the future.

- Set higher energy targets than are currently being delivered in the new construction projects. Institutions with strong energy policy and targets are demanding that building designs that deliver 50% or greater energy reduction from CBEC Mechanical Engineers should be included in the initial project team interview and be required to show how they could design an extremely energy efficient building given the campus infrastructure. All new construction and major renovation projects should include some form of renewable energy, i.e.: PV or fuel cell technology, and all minor building retrofits should consider the installation of infrastructure to receive future renewable energy installations. Consider Labs 21 energy requirements for new and renovated laboratories.
• The campus Energy Policy should include a specific program to address plug load energy impact including setting strict energy requirements for all lab and computer equipment purchasing and time of use agreements. Some institutions have even designed new buildings with timing controls for computer and desktop electronics, working with building occupants on appropriate timer and notifications for power availability (up to 20% of building energy is typically delivered off hours).

• Attach energy savings targets to campus funding allocations such as grant and endowment distributions, offering allotments for campus programs that are willing to work with energy savings plans in the purchase of new equipment or planned use of campus space.

SJSU will go out to bid on a one megawatt PV system from a 3rd party PPA program later this month. This will supply approximately 2% of the current campus energy requirements. The campus should continue to add solar capacity on campus thorough these types of agreements.

Resources:
SJSU Contact: Energy Analyst, FD&O
Labs 21 program: http://www.labs21century.gov/

OP Credit 8: Renewable Energy

Credit Criteria: This credit recognizes institutions that are using energy from clean and renewable sources. Points are awarded based on percentage of total energy that is obtained from clean and renewable sources. Points are weighted differently per source of renewable energy.

Credit Calculation:
- 2010 total energy consumed: 427,507 MMBtu
- Energy produced with co-generation: 118,634 MMBtu
- No other renewable energy sources on campus. See table below:

<table>
<thead>
<tr>
<th>Energy Generated</th>
<th>STARS Factor</th>
<th>Total Energy (MMBtu)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site campus electricity generation: 0 x 7 +</td>
<td>427,507</td>
<td>=</td>
<td>0</td>
</tr>
<tr>
<td>Non-electric on-site energy generation: 0 x 7 +</td>
<td>427,507</td>
<td>=</td>
<td>0</td>
</tr>
<tr>
<td>Renewable energy produced off-site: 0 x 7 +</td>
<td>427,507</td>
<td>=</td>
<td>0</td>
</tr>
<tr>
<td>Purchase of Renewable Energy Certificates: 0 x 1.75 +</td>
<td>427,507</td>
<td>=</td>
<td>0</td>
</tr>
<tr>
<td>Electricity produced using co-generation: 118,634 x 1.75 +</td>
<td>427,507</td>
<td>=</td>
<td>0.48</td>
</tr>
</tbody>
</table>

TOTAL Points 0.48
Assessment:
The university owns and operates a Cheng Cycle Cogeneration unit with a capacity of 6 MW, supplying about 80% of the campus electricity needs and about 90% of the steam load for building space heating and domestic hot water. This consists of a natural gas fired turbine and a Heat Recovery Steam Generator (HRSG). On an annual basis, Cogen provides about 80% of the electricity for campus and nearly 100% of the steam load for building space heating and domestic hot water. There is no renewable energy generated on the campus and SJSU does not purchase. SJSU is currently preparing a bid request to install one megawatt of photovoltaic generated power through a PPA agreement. This system will provide approximately 2% of the campus annual energy consumption.

Even though the campus co-generation plant supplies over 80% of the campus energy needs, it is gas powered, and therefore it is not considered a renewable energy source. STARS points for this credit weights more heavily for clean and renewable energy generation that institutions retains the rights to, whether or not produced on- or off- campus. Less weight is placed on purchasing RECs and non-renewable co-generation technologies.

Recommendation:
See OP EN credit 7 for a full discussion on Energy related recommendations.

Resources:
SJSU Contact: Energy Analyst, FD&O
EPA Power Purchase Agreement Info: [http://www.epa.gov/greenpower/buygp/solarpower.htm](http://www.epa.gov/greenpower/buygp/solarpower.htm)

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### Energy Tier Two Credits

#### Energy Tier Two Credit 1: Timers for Temperature Control

**Credit Criteria:** Institution uses timers to regulate temperatures based on occupancy hours in at least one building. Any automated system that regulates temperature based on occupancy hours in at least one building meets the criteria for this credit.

**Assessment:** The campus Central Energy Management & Controls System (CECMS) is programmed with building operating schedules that control the HVAC systems. The Air Handling Units turn on in the morning and off in the evening as commanded by these schedules. Individual thermostats are not common as they do not fit in with the energy management practice of centralized HVAC control which is tasked to operators at the campus Central Plant. About 90% of campus buildings are operated centrally via CECMS.
Energy Tier Two Credit 2: Lighting Sensors

Credit Criteria: Institution uses motion, infrared, and/or light sensors to reduce energy use for lighting in at least one building.

Assessment:
Lighting sensors are used in several buildings on campus. As a result of lighting retrofits in King Library, all the book stacks have occupancy sensors that shut off all lights except outlying lamps when no one is browsing the shelf. In Clark Hall, most of the classrooms have occupancy sensors that shut off the lights after 15 minutes with no use.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Energy Tier Two Credit 3: LED Lighting

Credit Criteria: Institution uses Light Emitting Diode (LED) technology in at least one lighting application (LED applications in exit signs and remote controls do not count for this credit).

Assessment:
In Washington Square Hall room 109, a large lecture hall, LEDs were used to replace the old HPS overhead pendant lamps.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Energy Tier Two Credit 4: Vending Machine Sensors

Credit Criteria: Institution has installed vending machine motion sensors for at least one vending machine.

Assessment:
SJSU currently does not have any vending machine sensors.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Recommendation:
Require vending miser units when contracting with outside companies who supply vending machines on campus.

Resources:

Energy Tier Two Credit 5: Energy Management System

Credit Criteria: Institution uses a centralized energy management system that allows it to track energy consumption and performance in multiple buildings in a central location.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>
Assessment: The campus Central Energy Management & Controls System (CECMS) is programmed with building operating schedules that control the HVAC systems. The Air Handling Units turn on in the morning and off in the evening as commanded by these schedules. The CECMS system consists of both legacy Barber Coleman hardware with an Invue front end and newer JACES with a Tridium front end.

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### Energy Tier Two Credit 6: Energy Metering

**Credit Criteria:** Institution meters all energy consumption (including electricity, natural gas, and purchased steam).

**Assessment:** The campus operates its own electricity grid as well as district steam and chilled water systems. Various buildings on campus have meters for all 3 commodities at the building level. These meters are read on a monthly basis.

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### Grounds

This category seeks to recognize institutions that plan and maintain their grounds with sustainability in mind. Beautiful and welcoming campus ground can be planned, planted, and maintained in any region while minimizing the use of toxic chemicals, protecting wildlife habitat, and conserving water and resources.

0.75 out of 3.0 possible points were earned in this category

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### OP Credit 9: Integrated Pest Management

**Credit Criteria:** This credit recognizes institutions that work to improve the sustainability of campus grounds through Integrated Pest Management (IPM). This approach promotes the health of human and non-pest wildlife while enabling institutions to maintain an attractive campus environment and minimize costs.

**Credit Calculations:**

- 0 points earned since SJSU has pest management guidelines but no formal four tiered IPM plan.

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San Jose State University STARS Report 2011
Davis Langdon, An AECOM Company
Assessment:
Current SJSU pest management practices and written guidelines address three out of the four criteria required for a comprehensive Integrated Pest Management (IPM) Plan. These criteria are: 1) Set action thresholds; 2) Monitor and identify pests; 3) Prevention; 4) Control.

The campus does have a document containing pest control guidelines, but does not have a standalone document detailing comprehensive campus IPM plan and practices. There is no section on the SJSU website detailing the IPM practices; however, there is reference to IPM practices on the King Library sustainability page. Current policy discourages pesticide use by focusing on prevention measures such as the regular replacement of mulch landscape so that pests cannot survive. Monitoring of pests only occurs for ground squirrels.

Recommendation:
SJSU is currently developing policy credits for the Dr. Martin Luther King Jr. Library LEED EBOM submission. One of the policy credits for LEED EBOM is a sustainable IPM plan which addresses all the STARS IPM plan requirements and adds a higher level of sustainability by requiring a list of least toxic pesticide options, universal notification prior to chemical application, and defining a set of emergency conditions that must be met prior to chemical application. This policy should be adopted across the campus and submitted as a campus-wide credit so that all future LEED EBOM projects can claim credit for it. Using this policy on a campus-wide basis would fulfill both the STARS assessment requirements as well as provide the basis for campus wide sustainability practices for pest management.

The two key components of an IPM plan where SJSU can improve is (1) Set action thresholds and (2) Monitor and identify pests. According to the US EPA, action thresholds provide a basis for when “pest populations or environmental conditions indicate that pest control action must be taken”. The campus IPM plan should include monitoring and action thresholds for each pest that is currently managed on campus. This will result in the appropriate control method being applied to the pest, if one is even needed.

Resources:
SJSU Campus Contact: Director of Facility Services, FD&O
EPA How to develop IPM Program: http://www.epa.gov/pesticides/ipm/schoolipm/append-b.pdf

Grounds Tier Two Credits

Grounds Tier Two Credit 1: Native Plants

Credit Criteria: Institution prioritizes use of native plant species in landscaping.

Assessment:
Since 2008 Facilities Development and Operations has implemented a process whereby only native trees are accepted as donations. Since that time, the majority of all trees planted on campus grounds are native. The exceptions are...
when the academic mission requests a specific species be planted or when a tree is removed and a similar tree is needed to fill the void, such as the iconic arch of the Mulberry Trees. FD&O has also implemented procedures whereby native plants and drought tolerant plants are planted in future garden areas. Such garden may or may not include color spots and most native plants stay dormant for several months of the year.

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**Grounds Tier Two Credit 2: Wildlife Habitat**

**Credit Criteria:** Institution has programs in place to protect and/or create wildlife habitat on institution-owned land.

**Assessment:**
SJSU’s biology department has created a wildlife habitat that is a certified Schoolyard Habitat site #1587 by the National Wildlife Federation. The site provides habitat for wildlife and learning opportunities for students.

**Resources:**
http://www.calstate.edu/newsline/Archive/01-02/020510-SJ.shtml

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**Grounds Tier Two Credit 3: Tree Campus USA**

**Credit Criteria:** Institution is recognized by the Arbor Day Foundation’s Tree Campus USA program.

**Assessment:**
SJSU does not participate in Tree Campus USA.

**Recommendation:**
As of June 2011, UCSD is the only California STARS rated institution participating in the Tree Campus USA program. Requirements and application for participation in the program are found on the Arbor Day Foundation website.

**Resources:**
Arbor Day Foundation Website: http://www.arborday.org/programs/treeCampusUSA/index.cfm

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**Grounds Tier Two Credit 4: Snow and Ice Removal**

**Credit Criteria:** Institution has implemented technologies or strategies to reduce the environmental impacts of snow and ice removal.

**Assessment:**
SJSU is exempt from this credit since snow and ice removal is not a part of campus operations.
Grounds Tier Two Credit 5: Compost

Credit Criteria: Institution comports or mulches waste from grounds keeping, including grass trimmings.

Assessment:
All of the tree & bush trimmings and the annual leaf fall are removed by SJSU grounds staff and placed into a 40 yard collection bin. When full, this bin is transported to a green waste facility where it is composted.

The grass areas on both main and south campuses are mowed weekly with a large riding mower. The grass clippings are left on the lawns to decompose and provide nutrients to the turf. This practice is called “grasscycling”, and reduces the loss of nitrogen from the soil, reduces the amount of water required for irrigation by acting as a mulch, saves time by not having to bag and transport the clipping to the collection bin, saves the cost and air emissions resulting from transporting the grass clippings to the composting facility, and removes over 500 tons per year from our waste stream.

Resources:
FDO Grounds Website: http://www.sjsu.edu/fdo/operations/grounds/maincampus/

Purchasing
This category seeks to recognize institutions that are using their purchasing power to help build a sustainable economy. Collectively, institutions spend many billions of dollars on goods and services annually. Each purchasing decision represents an opportunity for institutions to choose environmentally and socially preferable products and services and support companies with strong commitments to sustainability.

2.1 out of 7.5 possible points were earned in this category

OP Credit 10: Computer Purchasing

Credit Criteria: This credit recognizes institutions that are working to build a market for environmentally preferable computers. To qualify for Part 1, the institution must have a stated policy to purchase EPEAT Silver or higher computers. This policy must be publicly posted online. Part 2 criteria require the institution to report the total expenditures on EPEAT computers.

Credit Calculation:
- SJSU purchasing does not have a policy requiring EPEAT purchasing – 0 points earned
- SJSU does not track EPEAT computer purchases on campus – 0 points earned
Assessment:
Although SJSU does not have a stated policy to purchase EPEAT computers, the procurement and support services department recommends purchase of EPEAT computers when it is available and appropriate. No data on EPEAT purchasing is tracked at SJSU.

EPEAT, which stands for Electronic Product Environmental Assessment Tool, is an easy-to-use, on-line tool helping institutional purchasers select and compare computer desktops, laptops, and monitors based on their environmental attributes. EPEAT was developed using a grant by EPA and is managed by the Green Electronics Council (GEC). It is dedicated to informing purchasers of the environmental criteria of electronic products. GEC’s EPEAT website provides guidance for purchasers and manufacturers and hosts the database for EPEAT-registered products. EPEAT-registered computer desktops, laptops, and monitors must meet an environmental performance standard for electronic products IEEE 1680-2006.

Current UC policy requires purchasing of EPEAT Bronze computers at a minimum. Although there is no equivalent CSU policy to date, CSU Channel Islands requires computer purchases to meet EPEAT Gold standards.

Resources:
SJSU Campus Contact: Purchasing Manager, Procurement and Support Services

Electronic Product Environmental Assessment Tool (EPEAT)
Procurement tool to help institutional purchasers evaluate, compare, and select electronic equipment based on their environmental attributes.

Electronics Environmental Benefits Calculator (EEBC)
Calculator that estimates the environmental benefits of greening the purchase, use, and disposal of electronics. The EEBC was developed by the University of Tennessee, with support from Abt Associates and Dillon Environmental Associates, under a cooperative agreement with EPA.

ENERGY STAR® Product Savings Calculators
Series of calculators that quantify the cost savings associated with using ENERGY STAR certified products over traditional models.

OP Credit 11: Cleaning Product Purchasing

Credit Criteria: This credit recognizes institutions that purchase green cleaning products. Points earned for having green clean product purchasing policy, directives or guidelines. Points earned based on percentage of green cleaning products purchased.

Credit Calculation:
- 2010 Green Seal and/or EcoLogo Certified cleaning product purchases: $208,906

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>1.09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>2.0</td>
</tr>
</tbody>
</table>
2010 Total cleaning product purchases: $286,839
Calculation: 1.5 x 208,906 ÷ 286,839 = 1.09 points earned

Assessment:
This credit requires that there be an institution-wide stated preference to purchase Green Seal™ or EcoLogo™ certified cleaning products. The preference can take the form of purchasing policies, guidelines or directives. Additionally, the institution’s main cleaning or housekeeping departments and/or contractors must purchase these products. Each part of the credit is scored separately, with 0.5 points allocated to the policy and 1.5 points allocated to the total percentage of qualifying purchases on a cost basis.

While the campus does purchase Green Seal products it does not do so for all of the cleaning projects used on campus. There is no formal written policy or posting of the SJSU cleaning products purchasing policy online. The campus sustainability plan outlines green cleaning product purchasing as a goal. The Dr. Martin Luther King Jr. Library green purchasing standards, developed for the LEED EBOM submission, is currently being used to guide cleaning product purchasing in other buildings on campus but it has not been adopted formally.

Recommendation:
The LEED EBOM green cleaning policy being developed for the MLK Library should be formally adopted across the campus and submitted as a campus-wide credit so that all future LEED EBOM projects can claim this credit without resubmission.

Green cleaning programs should then be incorporated into contracts with any outside cleaning companies.

Resources:
LEED EBOM green cleaning and purchasing requirements

OP Credit 12: Office Paper Purchasing

Credit Criteria: This credit has two parts. Part 1 recognizes institutions that have an institution-wide stated preference to purchase recycled content office paper. Part two gives credit based on the percentage of recycled content office papers purchased.

Credit Calculations:
Part 1
0.5 points earned for having stated policy mandating recycled paper purchasing

Part 2
2010 Total office paper purchased: $301,356
2010 Recycled content office paper purchased (weighted value): $83,807**
**See table below for weighted value calculation
Calculation: $83,807 / $301,356 = 0.28 points

Points Earned 0.78
Points Possible 2.0
<table>
<thead>
<tr>
<th>Recycled Content (%)</th>
<th>Purchases</th>
<th>STARS Factor</th>
<th>Weighted Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 - 29%</td>
<td>$250.62</td>
<td>x 0.3</td>
<td>$75.19</td>
</tr>
<tr>
<td>30 - 49%</td>
<td>$103,881.16</td>
<td>x 0.6</td>
<td>$62,328.70</td>
</tr>
<tr>
<td>50 - 69%</td>
<td>$9,839.76</td>
<td>x 0.9</td>
<td>$8,855.78</td>
</tr>
<tr>
<td>70 - 89%</td>
<td>$54.86</td>
<td>x 1.2</td>
<td>$65.83</td>
</tr>
<tr>
<td>90 - 100%</td>
<td>$8,321.30</td>
<td>x 1.5</td>
<td>$12,481.95</td>
</tr>
</tbody>
</table>

TOTAL STARS WEIGHTED RECYCLED PAPER PURCHASES $83,807.45

Assessment:

Most of the recycled content paper products purchased by SJSU come from their authorized office supply vendor Office Max. The Office Max website used by SJSU is designed for CSU campuses. Office Max offers a select group of products or will substitute products with ones that help fulfill the State and CSU’s mandates to buy recycled content products. In addition, SJSU purchasing buyers have been instructed to ask vendors for recycle content paper options, when possible, in their solicitations to vendors.

Overall, SJSU scored lower in recycled content purchasing compared to other California Institutions. Most institutions reported over 50% of office paper purchases containing recycled content, with SJSU reporting 40% of containing recycled content.

It is of note that SJSU reported higher purchases of 90-100% recycled content office paper than any other California institution. However, the value 90-100% recycled content purchases are relatively low as a percentage of overall purchases. The table below compares the purchases of office paper in the 39-49% and the 90-100% recycled content categories.

<table>
<thead>
<tr>
<th>University</th>
<th>39-49% Recycled</th>
<th>% of Total Purchases</th>
<th>90-100% Recycled</th>
<th>% of Total Purchases</th>
<th>Total Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cal Poly Pomona</td>
<td>$51,704</td>
<td>17%</td>
<td>$0</td>
<td>-</td>
<td>$298,296</td>
</tr>
<tr>
<td>CSU Channel Islands</td>
<td>$544,889</td>
<td>86%</td>
<td>$0</td>
<td>-</td>
<td>$634,926</td>
</tr>
<tr>
<td>UC San Diego</td>
<td>$489,174</td>
<td>68%</td>
<td>$4,651</td>
<td>0.6%</td>
<td>$719,003</td>
</tr>
<tr>
<td>Santa Clara Univ.</td>
<td>$118,982</td>
<td>100%</td>
<td>$0</td>
<td>-</td>
<td>$118,982</td>
</tr>
<tr>
<td>Pomona College</td>
<td>$46,957</td>
<td>80%</td>
<td>$231</td>
<td>0.4%</td>
<td>$58,837</td>
</tr>
<tr>
<td>San José State Univ.</td>
<td>$103,881</td>
<td>34%</td>
<td>$8,321</td>
<td>2.8%</td>
<td>$301,356</td>
</tr>
</tbody>
</table>

Recommendation:

To increase the purchase of recycled paper on campus, SJSU should provide a clear purchasing policy to all departments regarding the purchase through the Office Max site, requiring recycled paper purchase and mandating the highest level of recycled content possible for general needs. Lower percentages of recycled content should be defined only for special purposes such as marketing and letterhead needs.
Resources:
State of California’s Buy Recycle Campaign: http://www.calrecycle.ca.gov/Buyrecycled/StateAgency/
CSU’s Buy Recycle Campaign: http://www.calstate.edu/CSP/recycle/recycle.shtml
SJSU Environmental Preferable Purchasing: http://www.sjsu.edu/pass/docs/pur/info/epp_guide.pdf

Appendix:
See Appendix for full listing of office paper purchases

OP Credit 13: Vendor Code of Conduct

Credit Criteria: This credit recognizes institutions that have taken proactive steps to ensure that their vendors meet minimum standards of environmental and social responsibility.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Assessment:
SJSU does not have a policy on vendor code of conduct.

Recommendation:
As of June 2011, this credit was not pursued by any other CSU STARS rated institution. UCSD pursued this credit, since vendor codes of conduct are required by the UC wide sustainable practices policy. Pomona College also has a Vendor Code of Conduct policy, and enforcement of this policy is monitored by the President’s Advisory Committee on sustainability.

Resources:

Purchasing Tier Two Credits

Purchasing Tier Two Credit 1: Historically Underutilized Businesses

Credit Criteria: Institution seeks to support historically underutilized businesses, minority-owned businesses, and women-owned businesses. This could take the form of giving preference during RFP processes, conducting targeted outreach about opportunities to work with the institution, and/or other efforts to increase purchases made from such businesses.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Assessment:
State of California and the CSU requires agencies/campuses to give preference to businesses that are certified as small business or Disabled Veteran Business Enterprises (DVBE). This policy is found in SJSU’s Policy Manual for Contracts and Procurement, Section 2.22 and 2.23.
Except from SJSU Policy Manual for Contracts and Procurement:
“The State is required to aid, counsel, assist, and protect, to the maximum extent possible, the interests of small business concerns in order to preserve free competitive enterprise and ensure that a fair proportion of the total purchases and contracts or subcontracts for goods & services for the State be placed with such enterprises.”

Resources:
CSU’s Contracts and Procurement: http://www.calstate.edu/CSP/dvbe/dvbe.shtml

Purchasing Tier Two Credit 2: Local Businesses

Credit Criteria: Institution gives preference to local products and businesses in its purchasing decisions.

Assessment:
SJSU does not have a policy giving preference to local businesses. SJSU policy is to award based on lowest bid or best value to the University. Local food purchases covered in the Dining credits are not included in this category.

Recommendation:
This may not be a credit that the campus can focus on, given bidding and contracting code that applies to the CSU system. That being stated, the campus might consider tracking how much of its purchasing comes from local businesses. If the percentage is relatively low, consider local business encouragement programs that have been instituted on other campuses. These programs work with the constraint of low bidding requirements by setting up programs to help local business understand the CSU purchasing system, to encourage their participation in the bidding process.

Transportation

This category seeks to recognize institutions that are moving toward sustainable transportation systems. Transportation is a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer. Due to the disproportionate exposures, these health impacts are frequently more pronounced in low-income communities next to major transportation corridors. In addition, the extraction, production, and global distribution of fuels for transportation can damage environmentally and/or culturally significant ecosystems and may financially benefit hostile and/or oppressive governments.

At the same time, campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage storm water. Institutions may realize cost savings and help support local economies by reducing their dependency in petroleum-based fuels for transportation.
OP Credit 14: Campus Fleet

Credit Criteria: This credit recognizes institutions that use cleaner fuels and fuel efficient vehicles. For this credit, the institution’s motorized fleet includes all institution-owned and operated vehicles used for transporting people and/or goods. Heavy construction equipment and maintenance equipment are not included.

Credit Calculation:
- 2010 total vehicles in campus fleet: 199
- 2010 fuel efficient or clean fuel vehicles in fleet: 107 (electric vehicles)
- Percent fuel efficient of clean vehicles: \( \frac{107}{199} = 0.537 \) (54%)
- Points calculation: \( 2 \times 0.537 = 1.08 \) points earned

Assessment:
Vehicles that STARS considers eligible to be considered to meet criteria for this credit are: Gasoline-Electric Hybrid, Diesel-Electric Hybrid, Plug-In Hybrid, 100% electric, Hydrogen Fueled, B20 or higher biofuel and E85 or higher ethanol. The most common clean fuel vehicle in campus fleets is the 100% Electric vehicles. San José State University is slightly above average, in the percent of fuel efficient/clean vehicles in their campus fleet, compared to other California universities.

<table>
<thead>
<tr>
<th></th>
<th>Hybrid (gas-electric)</th>
<th>Hybrid (plug-in)</th>
<th>100% Electric</th>
<th>B20+ Bio Fuel</th>
<th>Total Fuel Efficient/ Clean Fuel Vehicles</th>
<th>Total Vehicles in Campus Fleet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cal Poly Pomona</td>
<td>58</td>
<td></td>
<td>5</td>
<td>63</td>
<td></td>
<td>214</td>
</tr>
<tr>
<td>CSU Channel Islands</td>
<td></td>
<td>74</td>
<td></td>
<td>74</td>
<td></td>
<td>112</td>
</tr>
<tr>
<td>UC San Diego</td>
<td>58</td>
<td>308</td>
<td>58</td>
<td>424</td>
<td></td>
<td>925</td>
</tr>
<tr>
<td>Santa Clara Univ.</td>
<td>13</td>
<td>1</td>
<td>38</td>
<td>52</td>
<td></td>
<td>166</td>
</tr>
<tr>
<td>Pomona College</td>
<td>1</td>
<td>50</td>
<td></td>
<td>51</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td>San José State Univ.</td>
<td>107</td>
<td></td>
<td>107</td>
<td></td>
<td></td>
<td>199</td>
</tr>
</tbody>
</table>

Recommendation:
Establish a policy that requires replacement fleet vehicles to be either 100% electric if possible, or at least qualify for the California Air Resources Board certified Vehicles List.

Consider installing solar powered charging stations to completely mitigate carbon emissions from the campus fleet.

Resources:
California Air Resources Board: [http://www.arb.ca.gov/homepage.htm](http://www.arb.ca.gov/homepage.htm)
OP Credit 15: Student Commute Modal Split

Credit Criteria: This credit recognizes institutions where students commute to and from campus by a means other than single occupancy vehicle for the majority of their daily commute trips. Alternatives to single-occupancy vehicle transportation include living on campus, walking, bicycling, van or carpooling, taking public transportation, or riding a campus shuttle.

Credit Calculation:
- Credit Calculation: $4 \times (59.0\%) = 2.36$ points earned

<table>
<thead>
<tr>
<th>Student Commute Modal Split:</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of students who drive alone to campus: 41.0%</td>
</tr>
<tr>
<td>% of students who walk, bike or use other non-motorized means: 16.0%</td>
</tr>
<tr>
<td>% of students who use campus shuttle or public transportation: 36.0%</td>
</tr>
<tr>
<td>% of students who use carpool/vanpool: 7.0%</td>
</tr>
<tr>
<td>TOTAL % Using Alternative Transportation: 59.0%</td>
</tr>
</tbody>
</table>

Assessment:
Data for this credit was gathered from the results of the November 2010 Commute Survey report conducted by Transportation Solutions Center, a part of the services provided by SJSU’s Associated Students. The survey is administered to students annually via a voluntary online survey.

SJSU scored higher than other California institutions in this category due to their lower percentage of students driving alone to campus. Over the past 10 years, SJSU has seen a 19% decrease in the amount of students driving alone to campus. The SJSU Transportation Solutions center has contributed to this positive trend by encouraging public transportation use to students and offering free and/or discounted passes on certain public transit lines. With car sharing and bike programs planned for the future, it is expected that SJSU will continue to increase the percentage of students using alternative means of transportation.

Recommendation:
Continue the excellent work for this credit category. A bicycle sharing program and car sharing program are currently being considered. Consider amenities, such as a ‘cash out of parking’ program to further reduce single occupant vehicle trips to the campus and reduce the need for costly, future parking infrastructure.

Resources:
SJSU Campus Contact: Manager, Associated Students Transportation Solutions Center
OP Credit 16: Employee Commute Modal Split

Credit Criteria: This credit recognizes institutions where employees use preferable modes of transportation to travel to and from the institution. Institution's employees (faculty, staff, and administrators) get to and from campus by a means other than single occupancy vehicle for the majority of their daily trips.

Credit Calculation:  

- Credit Calculation: 3 x (48.9%) = 1.1 points earned

<table>
<thead>
<tr>
<th>Employee Commute Modal Split:</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of employees who drive alone to campus: 51.0%</td>
</tr>
<tr>
<td>% of employees who walk, bike or use other non-motorized means: 20.4%</td>
</tr>
<tr>
<td>% of employees who use campus shuttle or public transportation: 20.1%</td>
</tr>
<tr>
<td>% of employees who use carpool/vanpool: 8.4%</td>
</tr>
<tr>
<td>TOTAL % Using Alternative Transportation: 48.9%</td>
</tr>
</tbody>
</table>

Assessment:
SJSU Transportations Solutions center does not offer an employee commute survey. However, in spring 2010 a SJSU Urban and Regional Planning grad student completed an employee commute modal split survey as part of his thesis report. Results from this survey are the data used for STARS submission.

The employees’ results were somewhat comparable to the student results when looking at the percentage of employees carpooling and using non-motorized means to get to campus. The percent of employees who drive alone to campus is higher than the students and the percent of employees using public transportation is much lower than the students.

SJSU Transportation Solutions center offers an EcoPass to employees. Employees can purchase the EcoPass for $25, which is valid for approximately 7 months of unlimited rides on all Santa Clara Valley Transportation Authority (VTA) Buses and Light Rail.

Recommendation:
Targeted outreach to employees about the EcoPass card could possibly increase the number of employees taking advantage of this service.
Zip Car program can greatly increase employee alternative commuting habits as it offers a way for employees who take public transportation or use other alternative methods of commuting to maintain the use of those means and still make one-off appointments and meetings during their work day. Many higher-ed institutions have successfully used the Zip Car program and decreased the single occupant vehicle trip to campus with their employee populations.

**Resources:**
Zip Car Information: http://www.zipcar.com/universities
UCSD’s Zip Car Program: blink.ucsd.edu/facilities/transportation/commuting/solutions/zipcar.html

**Appendix:**
See Appendix for excerpt of thesis report with employee survey results

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**Transportation Tier Two Credits**

**OP Credit 1: Bicycle Sharing**

**Credit Criteria:** *Institution has a bicycle-sharing program or participates in a local bicycle-sharing program.*

**Assessment:**
SJSU does not currently have a bicycle sharing program; however, it is anticipated that one will be started in the near future. Planned for 2012, SJSU plans to participate in a county-wide Bikeshare Program (Bikeshare Pods) sponsored by Metropolitan Transportation Commission, Bay Area Air Quality Management District, and Valley Transportation Authority.

**Resources:**
MTA Bike Sharing: http://www.sfmta.com/cms/bshare/indxbishare.htm

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**OP Credit 2: Facilities for Bicyclists**

**Credit Criteria:** *Institution has indoor and secure bike storage, shower facilities, and lockers for bicycle commuters in at least one building.*

**Assessment:**
The Associated Students Transportation Solutions (TS) operates 6 secure bike parking facilities (Bicycle Enclosures) located throughout SJSU campus. The total storage capacity of all enclosures is 416. Each enclosure houses 15-30 lockers for storing bike accessories. In addition, many open racks of different shapes and storage capacities have been installed near every major building on campus that can accommodate a total of 250 bicycles. Currently
there are no centralized shower facilities for bicycle commuters; however, there are buildings on campus that have shower facilities available for campus users.

Resources:
TS website: www.ts.sjsu.edu
AS Bicycling Website: http://as.sjsu.edu/asts/index.jsp?val=sjsu_bicycles

**OP Credit 3: Bicycle Plan**

**Credit Criteria:** *Institution has developed a bicycle plan to make the campus more bicycle friendly.*

**Assessment:**
SJSU currently does not have a bicycle plan.

**Recommendation:**
Several of the Tier Two credit recommendations can be rolled into a comprehensive Bike Plan for the campus and many elements of a plan are already in place, including storage and the upcoming share programs. Consider LEED NC SS credit 4.2 for metrics on the appropriate amount of storage locations needed to support a bike culture as well as the need for appropriate and well distributed changing facilities.

**OP Credit 4: Mass transit**

**Credit Criteria:** *Institution offers free or reduced price transit passes and/or operates a free campus shuttle.*

**Assessment:**
SJSU has several discounted transit passes available to the students and employees. They are as follows:

**University transit pass (Eco Pass)** – Since 1994, the Associated Students (AS) has been in contract with the Santa Clara Valley Transportation Authority (VTA) to provide unlimited rides on all VTA bus and light rail lines, 365 days a year, to all students and employees. SJSU Transportation Services administers this program and distributes 30,000 Eco Passes every semester (twice a year).

**50% Discount on Altamont Commuter Express (ACE) train** – San Joaquin Regional Rail Commission provides 50% discount exclusively to SJSU students and employees on its ACE train’s monthly and 20-ride passes. The ACE passes are sold at Transportation Solutions/General Services Center.

**10% Discount on Highway 17 Express bus** – SJSU Parking Services provides a 10% subsidy on Highway 17 Express 31-Day and 10-Ride passes. Parking Services also underwrites the last two runs of this service to accommodate evening students. The bus passes are sold at Transportation Solutions/General Services Center. This line connects Santa Cruz to downtown San José.
Commuter Check Program – Administered by TS, this program allows SJSU employees to defer up to $230 per month or $2,760 per year tax-free for the purchase of transit tickets and passes. Pre-tax deductions are taken monthly from employees’ payroll and converted into commuter checks or credited into their transit card (e.g. Clipper Card for SF Bay Area).

Resources:
ACE train discount: [http://as.sjsu.edu/asts/index.jsp?val=ace_discount_program](http://as.sjsu.edu/asts/index.jsp?val=ace_discount_program)
Express bus discount: [http://as.sjsu.edu/asts/index.jsp?val=h17e](http://as.sjsu.edu/asts/index.jsp?val=h17e)
Commuter Check Program: [http://as.sjsu.edu/asts/index.jsp?val=commuter_checks](http://as.sjsu.edu/asts/index.jsp?val=commuter_checks)

OP Credit 5: Condensed Work Week

Credit Criteria: *Institution offers a condensed work week option for employees (Do not have to offer the option to all employees to earn credit).*

Assessment:
Bargaining Unit employees are given the opportunity to volunteer to participate in a compressed or alternate work schedule. An employee's request to participate is subject to the approval of his/her appropriate administrator. The actual days and hours of work are scheduled by the employee's administrator.

Recommendation:
Consider offering this option to all employees whose job description can support this type of schedule.

Resources:
CSU Labor Agreements: [http://www.calstate.edu/LaborRel/Contracts_HTML/current_cba.shtml](http://www.calstate.edu/LaborRel/Contracts_HTML/current_cba.shtml)

OP Credit 6: Telecommuting

Credit Criteria: *Institution offers a telecommute program for employees*

Assessment:
San José State University supports telecommuting. As a flexible work arrangement, telecommuting allows an employee the ability to achieve a balance between work responsibilities and family life. When there are opportunities for improved operational performance, reduced commuting miles, as part of a disaster recovery plan, or to facilitate the potential for University savings, such work arrangements will be considered.

Resources:
CSU Labor Agreements: [http://www.calstate.edu/LaborRel/Contracts_HTML/current_cba.shtml](http://www.calstate.edu/LaborRel/Contracts_HTML/current_cba.shtml)
OP Credit 7: Carpool Matching

Credit Criteria: *Institution has a carpool matching program.*

Assessment:
In coordination with the Regional Rideshare (511.org) Program, TS operates a ride matching program exclusively for SJSU students and employees. Students from Santa Clara, San Mateo, San Francisco, Alameda, Contra Costa, Santa Cruz, and Monterey counties are utilizing the rideshare matching service to find their carpool partners.

Resources:
Transportation Solutions: [http://as.sjsu.edu/asts/index.jsp?val=ts_overview](http://as.sjsu.edu/asts/index.jsp?val=ts_overview)

OP Credit 8: Cash-out of Parking

Credit Criteria: *Institution allows commuters to cash out of parking spaces* (i.e. *it pays employees who do not drive to work*).

Assessment:
Parking on all CSU campuses is a self-supporting enterprise fund; meaning no tax money is used to support any parking function. Parking permits pay for all parking operations. Anyone, including employees, who park must pay for parking.

Recommendation:
While some public transportation is subsidized by the ASU, this may be an economical option to building new parking structures.

OP Credit 9: Carpool Discount

Credit Criteria: *Institution offers reduced parking fees for car and vanpoolers.*

Assessment:
SJSU Parking Services provides preferential parking with special permits to carpoolers. Students who carpool with a carpool permit may enter the campus South Garage when the garage is closed to solo-drivers. Employee carpool permits are also available and are valid in conjunction with a SJSU Employee permit.

SJSU Parking Services runs 4 vanpools from Modesto, Manteca, Tracy, Livermore, Pleasanton and Scotts Valley. The vanpools are a membership based service primarily designed to serve daily employee commuters from those regions.

Resources:
Vanpool: [http://as.sjsu.edu/asts/index.jsp?val=r_vanpool](http://as.sjsu.edu/asts/index.jsp?val=r_vanpool)
OP Credit 10: Local Housing

**Credit Criteria:** Institution has incentives or programs to encourage employees to live close to campus.

**Assessment:**
On-Campus Housing is available to provide support to new Faculty and Staff seeking housing in the Bay area. Campus Village Building A (CVA) is an on-campus housing facility for SJSU Faculty and Staff located in the heart of the Campus Village housing community.

**Resources:**
http://housing.sjsu.edu/documents/fsguide.pdf

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OP Credit 11: Prohibiting Idling

**Credit Criteria:** Institution has adopted a policy prohibiting idling.

**Assessment:**
SJSU does not have a policy that prohibits idling.

**Recommendation:**
While California does address diesel truck idling through code, the campus would need to adopt a policy to address all unnecessary idling on campus. Education through signage at all parking structures as well as signs at loading docks and idling agreements with campus vendors should be considered.

**Resources:**
Cal State Monterey Bay, Idling Policy: http://transportation.csumb.edu/vehicle-idling

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OP Credit 12: Car Sharing

**Credit Criteria:** Institution participates in car sharing program (i.e. ZipCar, HourCar).

**Assessment:**
SJSU does not currently have a car sharing program. SJSU and the City of San José issued a joint Request for Proposals in 2011 to bring a car sharing program to the campus and local community.

**Recommendation:**
See comments for OP TP credit 16
Waste

This category seeks to recognize institutions that are moving toward zero waste by reducing, reusing, recycling, and composting. These actions mitigate the need to extract virgin materials such as trees and metals. It generally takes less energy and water to make a product with recycled material than with virgin resources. Reducing waste generation also reduces the flow of waste to incinerators and landfills which produce greenhouse gas emissions that can contaminate air and groundwater supplies and tend to have disproportionate negative impacts on low-income communities. Waste reduction and diversion also save institutions costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal.

7.2 out of 12.5 possible points were earned in this category

OP Credit 17: Waste Reduction

Credit Criteria: Institution has implemented source reduction strategies to reduce total waste generation (garbage, recycling, and compost) per weighted campus user compared to a 2005 baseline.

Credit Calculation:
- 2010 waste: 0.170 tons/person
- 2005 waste: 0.199 tons/person

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total disposed as garbage (Tons)</td>
<td>2,027.2</td>
<td>418.075</td>
<td>(1,609.13)</td>
</tr>
<tr>
<td>Total Recycling/Diversion (Tons)</td>
<td>1,430.84</td>
<td>3,577.7</td>
<td>2,146.86</td>
</tr>
<tr>
<td>Total Compostables (Tons)</td>
<td>456.08</td>
<td>532.73</td>
<td>76.65</td>
</tr>
<tr>
<td>Total Waste Quantity (Tons)</td>
<td>3,914.12</td>
<td>4,528.505</td>
<td>614.39</td>
</tr>
</tbody>
</table>

Assessment:
While the total waste sent to landfill decreased significantly due to recycling diversion increases, the overall waste total increased at SJSU between the years 2005 and 2010. The table above shows waste quantities for SJSU, comparing the baseline (2005) and performance year (2010). The largest increase seen is with the Mixed Dry Recyclables (paper, cardboard, plastic bottles, drinks cans, and glass bottles). SJSU partners with haulers who take waste from campus to a Material Recovery Facility where waste is sorted and either recycled or composted to the fullest extent possible.

Recommendation:
SJSU has an excellent waste tracking system. With this information the campus can take several steps to begin reducing overall waste generation on campus. Consider a review of Vendor agreements and other large purchasing agreements to target the large amount of waste that comes onto campuses through delivery packing. Removal of packaging, pallets, and other waste on campus can be included when Vendor Contracts come up for renewal. Institute a program that encourages Vendors and companies delivering products to find innovative ways to use reusable packaging and protection. These
containers can either be set aside for removal on the next trip or removed immediately during the delivery process. Establish storage locations where products can be delivered in large quantities, avoiding small or individual packaging. Green cleaning programs encourage the storage of cleaning products in large quantity and using refillable containers for daily applications.

Analyze the waste stream at on-campus housing, which historically generates a large amount of waste at most institutions. Some campuses make students sign waste agreements prior to move in, limiting the amount of furniture and refrigerators they can bring, or requiring deposits or removal of such items at the end of the year.

Resources:
SJSU Campus Contact: IWM Recycling and Moving Services Specialist, FD&O
Cal Poly Pomona Waste Reduction Initiatives:

Appendix:
See Appendix for breakout of waste per type

OP Credit 18: Waste Diversion

Credit Criteria: Institution diverts materials from the landfill or incinerator by recycling, composting, reusing, donating, or re-selling. Points are awarded based on the percentage of waste diverted from the landfill.

Credit Calculation:
- 2010 total waste sent to landfill: 418 tons
- 2010 diverted waste: 4111 tons
- Calculation: $3 \times 4111 \div (4111+418) = 2.72$ points earned

Assessment:
Moving & Recycling Services (MRS) is part of Facilities Development & Operations (FD&O). The responsibilities of Moving & Recycling Services include coordinating all of the waste diversion and moving activities on SJSU. MRS has programs in place for the recycling of cardboard, mixed paper, scrap metal, scrap wood, beverage containers, plastics, and white/brown goods.

Recycling bins have been provided in locations around campus for these items and recyclables are either picked up by recycling companies or are delivered to the recycling companies by the moving & recycling crew. All yard waste and food waste generated on campus is either composted at the hauler’s site or is used in a waste-to-energy facility. All waste that isn't already being picked up by one of SJSU’s recycling partners is picked up by SJSU’s hauler and taken to their MRF facility. At the Material Recovery Facility (MRF), recyclable and compostable items are removed from the trash and processed. The small amount of remaining waste that can’t be otherwise diverted is sent to the landfill, or to a waste-to-energy facility.
OP Credit 19: Construction and Demolition Waste Diversion

Credit Criteria: This credit recognizes institutions that have diverted construction and demolition (C&D) wastes. Points are awarded based on the percentage of C&D waste diverted.

Credit Calculation:
- 2010 total C&D waste send to landfill: 92 tons
- 2010 total C&D waste diverted: 8051 tons
- Calculation: \( \frac{8051}{8051 + 92} = 0.99 \) points earned

Assessment:
All Contractors working on Construction & Demolition projects at San José State are required to recycle at least 50% of the waste generated during a project. At the conclusion of each project, the contractor is required to submit a report that lists the quantities of materials recycled, the quantity of materials landfilled, and the quantity of materials that were reused. The following requirements are written into the contracts for Construction and Demolition project:

- The Work of this Contract requires that a minimum of 50% by weight of the construction and demolition materials generated in the Work is diverted from landfill disposal through a combination of re-use and recycling activities.
- For LEED® projects, requirements for submittal of LEED® documentation in compliance with Materials and Resources Credit 2.1 and Materials or Resources Credit 2.2, Construction Waste Management.
- Requirements for submittal of Contractor’s Construction Waste and Recycling Plan prior to the commencement of the Work.
- Contractor’s quantitative reports for construction waste materials as a condition of approval of the third progress payment.

Recommendation:
The minimum diversion rate for construction related waste should be 75%. Most construction debris containers in the greater bay area are taken to offsite sorting facilities that typically divert more than 80% they receive, so there should be no cost impact to implement this requirement. 75% will earn all LEED NC project 2 points and should be the minimum waste diversion required on the campus.

Resources:
SJSU Campus Contact: IWM Recycling and Moving Services Specialist, FD&O
OP Credit 20: Electronic Waste Recycling Program

Credit Criteria: This credit recognizes institutions that have e-waste recycling and/or reuse programs. E-waste contains components that can be recycled. Likewise, computers, cellular phones, and other electronic materials can be donated or re-sold at reduced cost to non-profit organizations and community groups. This credit is reserved for programs that take steps to ensure that workers’ basic safety is protected and environmental standards are met.

Credit Calculation:
- SJSU has a recycling program in place for institution e-waste
- SJSU has a recycling program in place for student e-waste

Assessment:
SJSU uses vendor Zak Enterprises to ensure proper, regulatory-compliant disposal of electronic equipment. Zak Enterprises is an e-waste dismantling company, whose first priority is reuse of an item, followed by refurbishment/reuse if possible, and ultimately disposing waste through a pledged e-stewards recycler only if the initial two options are not available. All e-waste items are dismantled at Zak Enterprise’s Santa Clara facility. All of the dismantled e-waste material is disposed of through reputable, long standing vendors and their customers are assured that none of it ends up in a toxic landfill (www.zakenterprises.com has complete information about their processes including worker information).

All E-waste generated by SJSU Faculty and Staff is picked up by Zak Enterprises. Students are able to bring their e-waste to the Associated Students Computer Center located in the Student Union. All e-waste collected at this location is then picked up by Zak Enterprises and processed as above.

Resources:
Faculty/Staff e-waste collection: http://www.sjsu.edu/fdo/operations/recycling/info/electronics/
Students/personal e-waste collection: http://as.sjsu.edu/ascsc/index.jsp?val=csc_repair

OP Credit 21: Hazardous Waste Management

Credit Criteria: This credit recognizes institutions that seek to minimize and safely dispose of all hazardous, universal, and non-regulated chemical waste. Points are awarded for having strategies in place to safely dispose of all hazardous, universal, and non-regulated chemical waste and seeks to minimize the presence of these materials on campus.

Credit Calculation:
- SJSU has a qualifying hazardous waste disposal program on campus.

Assessment:
Purchasing of Hazardous materials is limited to small quantities by individual departments at SJSU. Departments are not allowed to stockpile hazardous materials but instead must purchase on an as
needed basis. The EH&S department’s Hazardous Material Specialist closely monitors and inventories the waste disposal quantities. Limiting the amount of hazardous waste allowed prevents the departments from buying in excess and stockpiling waste.

The SJSU College of Science uses about 90% of chemicals on campus. They keep an inventory of chemicals and also accept chemicals from other departments for reuse. Before a chemical is disposed, the SJSU EH&S Hazardous Materials Specialist checks first with the College of Science to see if they can re-use the chemical.

Hazardous, chemical, laboratory wastes, and batteries are disposed via Veolia Environmental Services Company. This occurs once a semester. In the interim, the chemicals are stored in one location which is managed by the Hazardous Materials Specialist on campus. All lead acid batteries generated from Campus Auto Shop as well as light tubes/bulbs are recycled through the company Battery Systems.

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**Waste Tier Two Credits**

**Waste Tier Two Credit 1: Materials Exchange**

**Credit Criteria:** *Institution has a surplus department or formal office supplies exchange program that facilitates reuse of materials.*

**Assessment:**
SJSU’s Furniture/Equipment Reuse program matches unwanted furniture to people or departments who need them, thereby reducing the amount of old furniture that ends up in our mixed recycling bins. Although the furniture reuse program was implemented about five years ago, it was not very successful at the outset since people didn’t want to pay for the moving the furniture, even though the furniture itself was free. In 2008, management support was obtained and now moving the furniture is provided at no cost to the requester. The program is managed by SJSU’s Procurement department, and supported by the Facilities Development & Operations Recycling & Moving Services.

The type and condition of equipment and furniture determines whether the items are eligible for reuse on campus through the Furniture/Equipment Re-use Program or if it should be recycled. Several options exist, including: making property available to other departments on campus, donating items to local non-profit agencies and schools, sending equipment to a public auction under contract with the university, posting items on the Public Surplus web site, and dismantling property into separate components for recycling.

**Resources:**
[http://www.sjsu.edu/pass/purchasing/reuse/](http://www.sjsu.edu/pass/purchasing/reuse/)
[http://www.sjsu.edu/fdo/operations/recycling/info/surplus/](http://www.sjsu.edu/fdo/operations/recycling/info/surplus/)
### Waste Tier Two Credit 2: Limiting Printing

**Credit Criteria:** Institution limits free printing for students in all computer labs and libraries.

**Assessment:** Students must pay to print at SJSU. In the King Library it costs 20¢ per B&W page. Individual departments and labs vary in the rates charged for printing. Associated students have computer labs, but students must pay to print in these facilities as well. Charging for printing limits the amount students choose to print.

**Resources:**
- [http://as.sjsu.edu/ascsc/index.jsp?val=csc_printing](http://as.sjsu.edu/ascsc/index.jsp?val=csc_printing)
- [http://www.casa.sjsu.edu/labpolicies.htm#v](http://www.casa.sjsu.edu/labpolicies.htm#v)

### Waste Tier Two Credit 3: Materials Online

**Credit Criteria:** Institution’s default is to not print course catalogs, course schedules, and directories, but instead make these materials available online.

**Assessment:** SJSU campus directories, course catalogs, and course schedules are all available online. The online catalog is free while the printed catalog is only available for purchase in the bookstore. The online schedules and catalogs contain the most updated information. Additionally, information about International and Extended Studies online courses, Open University, Special Session, Professional Development, and lifelong learning opportunities are also available online.

**Resources:**
- SJSU Student Information: [http://info.sjsu.edu/](http://info.sjsu.edu/)

### OP Waste Tier Two Credit 4: Chemical Reuse Inventory

**Credit Criteria:** Institution has implemented a campus-wide inventory system to facilitate the reuse of laboratory chemicals.

**Assessment:** The SJSU Hazardous Materials Specialists collects all retrograde chemical waste from the various departments and keeps a detailed inventory. The College of Science (COS), which uses 90% of chemicals on campus, reviews this inventory for any possible chemical reuse.
OP Waste Tier Two Credit 5: Move-in Waste Reduction

Credit Criteria: Institution has a program to reduce residence hall move-in waste.

Assessment: SJSU Residence halls have an in-house recycling program; however, there are not specifically targeted programs to reduce move-in waste. Through these recycling bins much of the move-in waste, such as cardboard boxes, is collected and recycled. While there are initiatives throughout the year, there are no targeted programs specifically to reduce move-in waste. However, there is additional pick up of the cardboard bin during move in time.

Recommendation: Posting signage throughout the dorms during move-in times or including a move-in recycling component during the housing application process are ways that SJSU can target move-in waste reduction. Also, re-use program (such as ReCoop at Pomona college) reduces the amount of new material purchases, thereby decreasing the packaging waste generated.

Resources: Pomona College Re-coop program: http://www.pomonarecoop.com/

OP Waste Tier Two Credit 6: Move-out Waste Reduction

Credit Criteria: Institution has a program to reduce residence hall move-out waste.

Assessment: There are special collection bins set up during move-out time that collects used notebooks, clothes, leftover detergent, and other items that students would usually throw away during move-out. The residence halls staff works with Sacred Heart and Salvation Army to coordinate this donation program.

Water

This category seeks to recognize institutions that are conserving water and making efforts to protect water quality. Pumping, delivering, and treating water is a major energy user, so institutions can help reduce energy consumption and the greenhouse gas emissions associated with energy generation by conserving water. Likewise, conservation and effective stormwater management are important in maintaining and protecting finite groundwater supplies. Water conservation and effective stormwater management also reduce the need for effluent discharge into local surface water supplies, which help improve the health of local water ecosystems.
OP Credit 22: Water Consumption

Credit Criteria: Institution has reduced its water consumption per weighted campus user compared to a 2005 baseline. The performance year is the most recent year for which data is available. Points are earned based on the percentage reduction of total water consumption when compared to the baseline.

Credit Calculation:

- 2005 water consumption: 8,442 gallons/person
- 2010 water consumption: 7,723 gallons/person

<table>
<thead>
<tr>
<th>SJSU Campus Water Use</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Main Campus Water</strong></td>
<td><strong>South Campus</strong></td>
<td></td>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td></td>
<td>WELL</td>
<td>Central Plant (Potable)</td>
<td>SJWC</td>
<td><strong>Central Plant - Reclaim</strong></td>
</tr>
<tr>
<td>Performance YR 2010</td>
<td>146,020,816</td>
<td>23,576,212</td>
<td>753,984</td>
<td>15,651,152</td>
</tr>
<tr>
<td>Delta</td>
<td>(5,035,540)</td>
<td>(466,752)</td>
<td>(665,720)</td>
<td>(7,655,032)</td>
</tr>
<tr>
<td>Percent Reduction</td>
<td>-3.3%</td>
<td>-1.9%</td>
<td>-46.9%</td>
<td>-32.8%</td>
</tr>
</tbody>
</table>

Assessment:

SJSU current and upcoming strategies for water reduction include use of recycled water for industrial cooling, landscape irrigation, and indoor plumbing. Looking at the SJSU Campus Water Use Data table, the improvements to the cooling towers have already resulted in a 33% reduction of the Central Plant reclaim water. Future plans involve supplying recycled water for the boiler feeder at the central plant.

Comparing campus water use between 2005 and 2010 also shows a 73% reduction in South Campus well water. This is a result of the south campus stadium grass being converted to artificial turf. The remaining irrigation on South campus has been retrofitted to use recycled water. By year end 2011, SJSU will have retrofitted the irrigation of the Main campus to use recycled water.

The first project on campus to use recycled water for indoor plumbing is the Dr. Martin Luther King Jr. Library. As of March 2011, the King Library has 87 toilets and 37 urinals receiving recycled water. Additionally, future LEED project on campus, such as the new Student Health Center and the Student Union buildings, will incorporate recycled water strategies. These measures will further decrease the potable water use per person consumed on campus.
**Recommendation:**
SJSU can further its water reduction strategies by continuing to focus on the use of non-potable water for landscaping. Continue to focus on drought tolerant and low water use planting and require all new construction projects to design for xeriscaping landscape design. Additionally, the campus can review the recommendations made during the water use efficiency audit conducted by the Santa Clara Valley Water District in 2009 and create a list to prioritize installation of low water use plumbing fixtures that corresponds with building renovation.

**Resources:**

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**OP Credit 23: Stormwater Management**

**Credit Criteria:** *This credit recognizes institutions that implement policies and programs to reduce stormwater runoff and resultant water pollution. Credit is given to institutions that have storm water management policies and procedures for construction and renovation as well as for ongoing campus operations.*

**Credit Calculation:**
- 1 point earned for having a stormwater management policy for new construction projects
- 1 point earned for having a stormwater management policy for ongoing campus operations

**Assessment:**
All contracts for new development and construction projects require contractors to create a SWPPP plan. SmartGrid is the California enforcement agency that ensures all projects adhere to strict storm water management guidelines on new development projects.

SJSU meets criteria for ongoing campus operations by following state and local storm water management ordinances. The city of San José has strict policies mandating that nothing other than rain water can be discharged into the storm drains. SJSU adheres to these policies and require SJSU FD&O department employees to undergo training to ensure they adhere to and implement city guidelines.

As an alternate compliance path for ongoing operations, institutions can meet STARS criteria for this credit by implementing storm water management strategies such as living or vegetated roof, porous paving, retention ponds, stone swales, and vegetated swales. SJSU does not implement any of these additional storm water management strategies.

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San Jose State University STARS Report 2011
Davis Langdon, An AECOM Company
Water Tier Two Credits

Water Tier Two Credit 1: Waterless Urinals

Credit Criteria: *Institution uses at least one waterless urinal.*

Assessment:
There is one ‘Falcon Waterfree Technologies’ urinal that is operational. It is located in the downstairs Men’s restroom of Corporation Yard ‘B’ (Trades building).

Recommendation:
The campus needs to continue replacement of high water use urinals on campus. There are now many waterless urinals to choose from if the Falcon technology is not acceptable. Many institutions are using waterless urinals successfully, including UCSC and UC Merced.


<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Water Tier Two Credit 2: Building Water Metering

Credit Criteria: *Institution has building-level water consumption meters for at least one building.*

Assessment:
The campus operates its own water distribution system. Various buildings on campus have water meters. These meters are read on a monthly basis.


<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Water Tier Two Credit 3: Non-Potable Water Usage

Credit Criteria: *Institution uses non-potable water (e.g. harvested rainwater or gray water) for irrigation and/or other applications.*

Assessment:
SJSU is a customer of South Bay Water Recycling (SBWR), a City of San José program. The University currently has 3 recycled water accounts with SBWR and uses the recycled water for Irrigation of South Campus Athletic field, Main Campus cooling towers, and for industrial applications. All toilets flushing in King Library use non-potable water via dual plumbing. Currently, King Library is the only building on campus that uses recycled water for plumbing.


<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25</td>
<td>0.25</td>
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</tbody>
</table>
Water Tier Two Credit 4: Tier Two - Xeriscaping

**Credit Criteria:** Institution uses xeriscape landscaping techniques, including the selection of drought tolerant plants.

**Assessment:**
All of the Ivy plantings on campus were selected because they are drought tolerant plants. New areas where these are planted include Morris Daily Auditorium (backside), Hoover Hall, and many parts of Campus Village (the towers). SJSU FD&O has also implemented a procedure that specifies native plants and drought tolerant plants are to be planted in future garden areas.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
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</tr>
</tbody>
</table>

Water Tier Two Credit 5: Weather-Informed Irrigation

**Credit Criteria:** Institution uses weather data or weather sensors to automatically adjust irrigation practices.

**Assessment:**
SJSU does not use weather informed irrigation on campus.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Possible</td>
<td>0.25</td>
</tr>
</tbody>
</table>

**Recommendation:**
In order to meet compliance for this credit, some institutions have irrigation systems connected to a weather station (on site) which allows the irrigation to be adjusted based on up-to-date climate data. A common system used by other institutions is the ‘Rainbird Maxicom’ controller. Other campuses have the grounds department monitor rainfall and adjust or turn off the irrigation after rainfall to limit the use of irrigation.

**Resources:**
Example of weather informed irrigation:
http://www.colorado.edu/facilitiesmanagement/facilities/grounds/index.html
Section 3: PLANNING, ADMINISTRATION AND ENGAGEMENT

<table>
<thead>
<tr>
<th>Points Possible</th>
<th>Points Earned</th>
<th>Planning, Administration and Engagement Categories</th>
</tr>
</thead>
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<td>52.2</td>
<td>Category Total</td>
</tr>
<tr>
<td>18.0</td>
<td>10.0</td>
<td>Coordination and Planning</td>
</tr>
<tr>
<td>13.75</td>
<td>13.75</td>
<td>Diversity and Affordability</td>
</tr>
<tr>
<td>19.8</td>
<td>12.8</td>
<td>Human Resources</td>
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<tr>
<td>16.75</td>
<td>0.25</td>
<td>Investment</td>
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<tr>
<td>31.75</td>
<td>15.4</td>
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Planning, Administration and Engagement Highlight

Diversity

<table>
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<th>Points Possible</th>
<th>Points Earned</th>
<th>Credit Title</th>
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<tr>
<td>13.75</td>
<td>13.75</td>
<td>Diversity and Affordability</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Diversity and Equity Coordination</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Measuring Campus Diversity Culture</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Support Programs for Under-Represented Groups</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Support Programs for Future Faculty</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Affordability and Access Programs</td>
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<td>0.25</td>
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</tr>
<tr>
<td>0.25</td>
<td>0.25</td>
<td>Employee Training Opportunities</td>
</tr>
<tr>
<td>0.25</td>
<td>0.25</td>
<td>Student Training Opportunities</td>
</tr>
</tbody>
</table>
Consistent with the University’s emphasis on diversity, SJSU earned all possible STARS credits in this category. Within STARS, this category of criteria focuses on the effort an institution can make to advance diversity and affordability on campus. It means having diverse groups coming together and working collaboratively to address sustainability challenges. San José State University understands that a diverse student body, faculty, and staff provide rich resources for learning and collaboration, and has directly addressed and supported diversity issues for many years.

The Office for Equal Opportunity and Workforce Planning is responsible for the Diversity and Equity work on SJSU’s campus. The office implements the University's Non-Discrimination, Harassment and Affirmative Action policies, procedures and practices to ensure that no person is discriminated against in employment, educational programs and activities on the basis of sex, race, color, gender, national origin, sexual orientation, marital status, disability, veteran status, genetic information and for participating in any protected activity. In addition to efforts coming out of Human Resources, there are equivalent efforts in Student Affairs and several student groups associated with diversity issues.

In addition to the above enforcement and compliance duties, The Office for Equal Opportunity and Workforce Planning is charged with overseeing the University Diversity Master Plan. The first of its kind in the California State University System, the coordinated, campus-wide Inclusive Excellence Diversity Master Plan outlines ways in which the university can more fully embrace and celebrate its diversity.

Diversity activities on campus include:

- Measurement of campus diversity culture with yearly assessments and surveys.
- Educational Opportunity Program (EOP) works to provide student academic support of low-income and educationally disadvantaged students.
- The LGBT Resource Center supports the LGBTIQQA (Lesbian, Gay, Bisexual, Intersex, Queer, Questioning, Ally) students of San José State University.
- MOSAIC offers support, advocacy for historically under-represented groups, leadership opportunities, and intentional programming that focus on critical thought, social justice, and cultural empowerment for the SJSU community.
- Training for new SJSU faculty to teach how to do diversity outreach.
- Two federally funded TRIO programs at SJSU are Upward Bound and Educational Talent Search, which seeks to increase the number of youth from low-income or academically disadvantaged backgrounds who complete high school and enroll in post-secondary programs.

**Coordination and Planning (CP)**

This category seeks to recognize colleges and universities that are institutionalizing sustainability by dedicating resources to sustainability coordination, incorporating sustainability into their primary campus plans, and developing plans to move towards sustainability. Staff and other resources help an institution organize, implement, and publicize sustainability initiatives. These resources provide the infrastructure that fosters sustainability within an institution. Strategic and physical campus plans guide an institution and its physical development. These important documents establish an institution’s priorities and influence budgeting and decision-making. Incorporating sustainability into these plans is an important
step in making sustainability a campus priority and may help advocates implement sustainable changes. Sustainability plans and climate action plans provide a road map for how to achieve sustainability goals.

10 out of 18 possible points were earned in this category

PAE Credit 1: Strategic Planning

Credit Criteria: This credit recognizes institutions with active committees, offices, or coordinators charged by the administration or board of trustees to coordinate sustainability work on campus. The committee, office, and/or coordinator focus on sustainability broadly (i.e. not just one sustainability issue) and cover the entire institution.

Credit Calculation:

- **3 points earned** for having a sustainability committee and coordinator

Assessment:
The SJSU sustainability board has 21 members, including administration, faculty from different departments, and student members. The SJSU Sustainability Board advises and makes recommendations to the Academic Senate and the President regarding the following:

- Setting and measuring of progress towards meeting University-wide goals to promote sustainability across academic and non-academic divisions.
- Benchmarking SJSU sustainability efforts relative to state and national leaders in university sustainability.
- Working with appropriate units in the university as a resource for centralizing and effectively communicating information on SJSU’s sustainability efforts, both internally and externally.
- Integrating sustainability into key planning documents and procedures.
- Educating and engaging with campus stakeholders and external partners on sustainability through research, projects, workshops, and other events.

In 2009, the Director of Sustainability position was created at SJSU. This position is a senior-level faculty administrative position that reports directly to the President and serves as a member of the President's Cabinet. The Director of Sustainability is expected to develop recommendations involving issues and initiatives related to sustainability and bring them to the attention of the President and the Cabinet. The Director of Sustainability is responsible for directing and coordinating the University’s efforts to promote a culture of sustainability throughout the campus and the community. In addition, the sustainability director is entrusted to integrate sustainability research, education and practices into the educational and outreach missions of San José State University.

Recommendation:
The creation of the Director of Sustainability position should be renewed beyond the August 2011 end date and the position holder should continue to be a member of the President’s Cabinet. SJSU can gain further benefit from creating auxiliary task forces to work under the Sustainability Committee to focus on
sustainability areas that need particular improvement or advancement. For example, at UCSD there are four main groups on campus that oversee environmental initiatives, including a Climate Solutions Working Group (CSWG). Cal Poly Pomona also has a specific climate commitment task force.

There should be representatives from each main division within operations including planning and construction, transportation, dining, grounds, maintenance, purchasing, and campus housing.

**Resources:**

**SJSU Campus Contact:** SJSU Sustainability Board Chair

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### PAE Credit 2: Strategic Planning

**Credit Criteria:** This credit recognizes institutions whose formally adopted strategic plan, or equivalent guiding document, includes sustainability at a high level. The plan should cover the entire institution. Points are earned for including environmental, social, and economic dimensions of sustainability at a high level within the plan.

**Credit Calculation:**

- **0 points earned** since the SJSU strategic plan does not include a sustainability component

**Assessment:**

Although SJSU has created a sustainability addendum to the Campus Master Plan, the campus strategic plan at SJSU does not yet include a sustainability component.

**Recommendation:**

The SJSU sustainability addendum is a first step in addressing sustainability campus wide.

Areas of sustainability focus for the Strategic Plan are a Climate Action Plan, addressing future carbon neutrality, and a focus on sustainably in the Long Range Action Plan. Additionally, there should be focus on incorporating sustainability more fully into the SJSU curriculum. The results of the STARS audit should be used as a tool to drive planning focus.

**Appendix:**

See Appendix for SJSU Sustainability Addendum to Campus Master Plan

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### PAE Credit 3: Physical Campus Plan

**Credit Criteria:** This credit recognizes institutions that have included sustainability at a high level within their campus master plan. An amendment to the plan may count for this credit, as long as the institution always presents the amendment with the original plan. Plans developed at the system level are eligible for this credit.

**Credit Calculation:**

- **4.0 points earned**

**Factor 1:**

- **4.0 points possible**
Credit Calculation:
- 4 points earned for having an amendment to the SJSU campus master plan which covers the economic, social, and environmental dimension of sustainability

Assessment:
The SJSU Sustainability Policy was developed in 2010 as an addendum to the SJSU Campus master plan. The overarching goal of the Policy is to "incorporate sustainability principals through collaborative design and sustainability operations." The policy includes both 'guiding sustainability principals' for the university, and provides measurable goals related to the built environment, alternative transportation, waste reduction, procurement, environmental health and safety, landscaping and resource use.

Recommendation:
See recommendations for PAE credits 1, 2 and 3 above as well as other recommendations in the Climate and Buildings section of the OP credits.

While the addendum can serve as a temporary measure, deep sustainability related to the physical campus must be addressed in every part of the campus master plan and long range development plan. Carbon neutrality including alternative transportation, resource and utility conservation, buildings and grounds that provide healthy learning and working environment and act as teaching tools, as well as long term budget economies can all be realized through careful campus planning.

Resources:
UC Merced LRDP: http://lrdp.ucmerced.edu/2.asp?uc=1&lvl2=49&contentid=50
UC Davis LRDP: http://sustainability.ucdavis.edu/progress/commitment/planning/lrdp.html

Appendix:
See Appendix for SJSU Sustainability Addendum to Campus Master Plan

PAE Credit 4: Sustainability Plan

Credit Criteria: This credit recognizes institutions that have developed a comprehensive plan to move towards sustainability. Institutions earn credit for having a sustainability plan developed with input from faculty, staff, and students. The plan includes measurable goals for achieving sustainability with corresponding strategies and timeframes to achieve the goals.

Credit Calculation:
- 3 points earned for the SJSU sustainability policy (addendum to campus master plan) which serves as the SJSU campus sustainability plan

Assessment:
In 2010, a project committee consisting of SJSU faculty, staff and students, and hired consultants worked together to create the SJSU sustainability addendum to the Campus Master Plan. The committee worked together to lay out the framework for the policy and also to identify specific areas of concern to be included within the policy. The highlighted areas selected were: Site and Built Environment,
Alternative Transportation and University Fleet, Waste Reduction, Procurement, Environmental Health and Safety, Landscaping, Resource Use, Communication & Accountability in University Staff Training. Specific actions and goals were developed for each of the areas included in the policy by requesting staff member input. Staff in each of the target departments was asked to identify areas of concern and help the planning group develop measurable goals that would be appropriate for both short and long range planning. A sampling of the measurable goals included in the policy includes:

1. Increase student users of alternative transportation to over 48% by Fall 2012.
2. Design and build new buildings to minimum LEED-NC Silver certification standards or equivalent.
3. Decrease potable water use 48% from 2010 levels by 2015 baseline.
4. Reduce daily waste generation per FTE by 0.5% each year until 2020; ultimate goal is waste generation reduction of 0.5 lb per FTE per day from 2008 baseline.
5. Require all food vendors to use reusable or compostable serverware including plates, flatware, and cups by 2014.

Current ways that SJSU measures the goals outlined in the sustainability policy are:

1. SJSU Transportation Solution center tracks the different ways that students commute to campus by conducting a yearly survey. The survey results are published in a report that is used to identify areas where more support can be provided to encourage sustainable transportation. Survey results are also sent out to all students.
2. SJSU potable water use is tracked via well pumps read to see how much water is consumed on the main campus; this data is compiled monthly (meters is in gallons, and then converted to CCF). Strategies for future water reduction include conversion of the main campus to using recycled water for irrigation.
3. Spartan Shops reviews its purchasing goals on an annual basis by using internal data sources to compare year-over-year performance and compliance. Specific goal percentages are tabulated, discussed, and evaluated prior to each Fall Semester.
4. SJSU Recycling/Moving Services produces an annual waste report that tracks the waste generation on the SJSU campus. Additionally, Spartan Shops receives and reviews updated data from GreenWaste Recovery, Inc. regarding its waste generation reduction and landfill diversion rate.

There are currently two LEED projects being constructed on campus. SJSU follows the CSU Executive Order 987 with regards to LEED, which mandates that all new construction must meet LEED silver standards. It is verified by pursuing third party LEED certification.

Appendix:
See Appendix for SJSU Sustainability Addendum to Campus Master Plan

PAE Credit 5: Climate Plan

Credit Criteria: This credit recognizes institutions that have developed a formal strategy to reduce their greenhouse gas emissions. Adopting a formal plan indicates the institution’s commitment to reducing its global warming impact. Since multiple facets of an institution’s operations can help reduce emissions, developing a climate action strategy can help an
institution realize its sustainability goals as well as climate targets. Points are earned for having a formal plan to mitigate its greenhouse gas emissions. The plan includes a measurable, numerical goal or goals and a corresponding date or dates by which the institution aims to achieve its goal(s). The plan has been adopted by the institution’s administration.

Credit Calculation:
- 0 points earned since SJSU has no formally adopted Climate Action Plan

Assessment:
SJSU has no formally adopted Climate Action Plan.

Recommendation:
We recommend that the campus join the ACUPCC, following in the footsteps of nearly one quarter of all higher education institutions in the country. The ACUPCC provides a framework for addressing campus carbon neutrality planning that is widely accepted among higher education institutions. The 3 step process can be completed within one year but two years are allowed if needed.

Step 1: The President of SJSU must sign the ACUPCC and make a public commitment to carbon neutrality for the campus.

Step 2: Within the first 2 months SJSU must commit to 2 out of 7 tangible action items that will be implemented before the end of the 2nd year from signing the commitment. SJSU has already addressed at least two action items by requiring that all new projects be built to LEED Silver Standards, and by encouraging the use of public transportation for all people commuting to the institution.

Step 3: Within one year submit a full GHG emissions report. SJSU already reports on 2 of the 3 categories required (see detailed comments under the OP Climate section).

Step 3: Within 2 years, submit a Climate Action Plan. Work on strategies to get broad buy-in from the entire campus community. Appoint a committee with representatives from all sectors of the campus to develop the plan. Many institutions engage an outside consultant, while others staff this effort from in-house. Either way, development of a CAP takes deep discussion, planning, and commitment from every level of campus life. CAPs should address the following:

- Policies and procedures for reducing the university’s emissions
- A target date for achieving climate neutrality rapidly
- Interim targets to track progress toward this goal
- Actions to make climate neutrality/sustainability an integral part of the educational experience for all
- Actions to expand research or other efforts necessary to achieve climate neutrality
- An office or group to coordinate efforts
- Cross-sector responsibility for implementation
- Development of a baseline of current emissions, reduction schedules
- Ongoing measures of progress
- Periodic progress reports to campus and community
- Training/education for all groups in the campus
- Rewards and incentives for all groups in the campus
- Encouragement and support of student leadership on climate neutrality
Step 4: ongoing updates and GHG emissions reporting

Resources:
SJSU Campus Contact: FD&O Director of Energy and Utility Services
ACUPCC: http://www.presidentsclimatecommitment.org/

Appendix:
See Appendix for ACUPCC Commitment Form
See Appendix for Cool Campus Climate Planning Guide

Diversity and Affordability (DA)

This category seeks to recognize colleges and universities that are working to advance diversity and affordability on campus. In order to build a sustainable society, diverse groups will need to be able to come together and work collaboratively to address sustainability challenges. People of color and low-income communities tend to suffer disproportionate exposure to environmental problems. This environmental injustice happens as a result of unequal and segregated communities. To achieve environmental and social justice, society must work to address discrimination and promote equality. The historical legacy and persistence of discrimination based on racial, gender, religious, and other differences makes a proactive approach to promoting a culture of inclusiveness and important component of creating an equitable society. Higher education opens doors to opportunities that can help create a more equitable world, and those doors must be open thought affordable programs accessible to all regardless of race, gender, religion, socio-economic status, and other differences. In addition, a diverse student body, faculty, and staff provide rich resources for learning and collaboration.

13.75 out of 13.7 possible points were earned in this category

PAE Credit 6: Diversity and Equity Coordination

Credit Criteria: This credit recognizes institutions with active committees, offices, or officers charged by the administration or board of trustees to coordinate diversity and equity work on campus. Points earned for having a diversity and equity committee, office, and/or coordinator that advises on and implements policies and programs related to diversity and equity on campus.

Credit Calculation:
- 2 points earned for having a SJSU Campus Climate Committee and a Diversity Office (note only one of the two is required to obtain STARS credit)

Assessment:
Diversity Committee: The SJSU Campus Climate Committee (CCC), a presidential advisory group composed of faculty, students, administrators, and staff. Their mission is to actively promote a civil
campus climate in support of the diverse campus at SJSU. The committee upholds three convictions in support of their mission:

1) Respect for the individual
2) Commitment to issue and problem resolution
3) Open communication and feedback

Resources:

SJSU Campus Contact: SJSU Campus Climate Committee Chair
SJSU Diversity Master Plan: http://www.sjsu.edu/diversityplan/about/

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PAE Credit 7: Measuring Campus Diversity Culture

**Credit Criteria:** This credit recognizes institutions that systemically assess the diversity and equity culture on campus. Points earned for administering an assessment within the last five years which measures attitudes about diversity and equity on campus. The institution must use the results of the survey to guide policy, programs, and initiatives.

**Credit Calculation:**

- 2 points earned for administering the SJSU Campus Climate Survey within the past five years and using the results to guide policy, programs and initiatives

**Assessment:**

The SJSU Campus Climate Survey was administered spring 2010. The SJSU Office of Institutional Research conducts a Campus Climate Survey, and the intent is to assess what sense of community and respect for diversity exists among all members of the campus. The anonymous survey is given to students, faculty, and staff. The student survey addresses perceptions of the campus climate, the degree of sensitivity on campus regarding racial/ethnic, gender, disability and other issues, the experiences of diversity issues within the classroom and larger learning environment, awareness of procedures to report discriminatory behaviors, and collects detailed demographic information. The survey for faculty/staff contains questions dealing with racial/ethnic relations, the apparent fairness of professors and staff, and opinions regarding SJSUs diversity policies.

After the first Campus Climate survey was administered, focus groups were created to get further input from students and staff. The results of both the 2010 survey and focus groups are currently being discussed with the SJSU President to determine the best way they can be incorporated into the SJSU campus.

**Recommendation:**

The Campus Climate survey was also administered in 2006. Although the 2006 results to the survey were posted online, no direct actions or policy changes resulting from the survey findings were tracked. The 2010 survey results are currently being reviewed with the president’s office. STARS documentation is interesting in seeing how the survey results are used to shape policy, programs, and initiatives. SJSU’s STARS submission would be stronger for this credit if they could provide specific examples of how the Campus Climate survey was used to drive change on the SJSU campus.
Resources:
SJSU Campus Contact: SJSU Campus Climate Committee Chair
Campus Climate Survey: http://www.oir.sjsu.edu/Assessment/instruments/default.cfm

PAE Credit 8: Support for Under-Represented Groups

Credit Criteria: This credit recognizes institutions that have programs in place to support under-represented groups on campus. Points earned for having mentoring, counseling, peer support, affinity groups, academic support programs, or other programs in place to support under-represented groups on campus.

Credit Calculation:
- 2 points earned for SJSU programs in place to support under-represented groups including EOP programs, LGBT Resource center and MOSAIC

Assessment:

EOP Programs - The Educational Opportunity Program (EOP) is designed to improve student academic support of low-income and educationally disadvantaged students. Services provided by the EOP program are:

- Award EOP Grants (for eligible students).
- Help students find information on academic policies and procedures.
- Offer transitional programs that will acclimate students to SJSU.
- Offers use of computers in the Learning Assistance Resource Center (LARC).
- The EOP Peer Mentor Program is designed to assist a small group of first-year San José State University EOP students adjust to their first year in college.
- Provide students with Advising Services regarding scheduling classes and meeting graduation requirements.

LGBT - The mission of the LGBT Resource Center is to support the LBTIQQQA (Lesbian, Gay, Bisexual, Intersex, Queer, Questioning, Ally) students of San José State University. In collaboration with other campus programs, the Resource Center works to meet the needs of students to promote the successful completion of their educational goals. The center networks with campus and San José area organizations in order to build a stronger community and support system for the LBTIQQQA students of San José State University.

MOSAIC - This program provides a safe and welcoming environment which honors and celebrates diversity. MOSAIC offers support, advocacy for historically under-represented groups, and intentional programming focusing on critical thought, social justice, and cultural empowerment for the SJSU community. MOSAIC collaborates with student organizations, academic departments, staff, residence halls, and members of the surrounding community. Services offered include: a place to gather and talk, programs and events relating to diversity issues, student leadership training and development, small resource library, and a speaker resource database.
Resources:
EOP Program – http://www.sjsu.edu/eop/
LGBT Resource Center – http://www.sjsu.edu/lgbtrc/
MOSAIC - http://www.sjsu.edu/studentaffairs/mosaic/

Appendix:
See Appendix for more information about campus groups

PAE Credit 9: Support Programs for Future Faculty

Credit Criteria: This credit recognizes institutions that are taking steps to help build a more diverse faculty by supporting future faculty members from underrepresented groups. Points earned for having mentoring and other support programs that encourage the participation of under-represented groups in higher education.

Credit Calculation:
- 4 points earned for SJSU support programs to support diverse pool of future faculty

Assessment:
There are several programs in place at SJSU to support future faculty members from underrepresented groups:

1. The “Inclusive Excellence Diversity Master Plan” (IEDMP) Initiatives have resulted in the creation of support programs for future faculty. One such IEDMP initiative is mandatory training for new SJSU faculty which teaches new faculty how to conduct diversity outreach. This initiative, as outlined in the Inclusive Excellence/Diversity Master Plan for SJSU, was designed to inform faculty recruitment committees about strategies for increasing the diversity of applicant pools.

2. A second IEDMP initiative involves specific outreach targeted to reach diverse faculty. Department Chairs compete for funding to attend national disciplinary conferences and to conduct recruitment outreach efforts focused on diverse candidates. As part of these efforts, SJSU department chairs have met with interest groups including women’s groups, African American, Asian/Pacific Islander, Latino/a, and LGBTQ groups at national disciplinary conferences.

3. The Chancellor’s Doctoral Incentive Program provides loans to approved doctoral candidates that can be repaid with service in any of the CSU campuses. Applicants must have a faculty mentor from one of the CSU campuses.

4. The Stanford/San José State University IRACDA Program combines a traditional, principal-investigator directed postdoctoral research experience at Stanford University with mentored teaching experiences at San José State University. The goal of this program is to create a career development path for postdoctoral scientists with an interest in teaching underrepresented minority students.
5. The Ronald Erwin McNair Postbaccalaureate Achievement Award Program was authorized in his honor by Congress in 1986 to increase the number of college students from low income, underrepresented backgrounds pursuing doctoral degrees. It was also aimed at increasing the number of under-represented faculty teaching in colleges and universities.

6. The California Pre-Doctoral Program is designed to increase the pool of potential faculty by supporting the doctoral aspirations of California State University (CSU) students who have experienced economic and educational disadvantages. The program places a special emphasis on increasing the number of CSU students who enter doctoral programs at one of the University of California (UC) institutions.

Resources:

SJSU Campus Contact: AVP Faculty Affairs
CSU Chancellors office initiative - http://www.calstate.edu/HR/CDIP/
College of Science grant partnership with Stanford –http://iracda.stanford.edu/
McNair Scholars Program –http://mcnair.sjsu.edu/
California Pre-Doctoral Program – http://www.calstate.edu/predoc/

PAE Credit 10: Affordability and Access Programs

Credit Criteria: This credit recognizes institutions that are implementing strategies to improve their accessibility and affordability. Points earned for having policies and programs in place to make it accessible and affordable to low-income students.

Credit Calculation:
- 3 points earned for having affordability and access programs as SJSU including: Federal TRIO programs and financial aid to support low-income students.

Assessment:
Federal TRIO Program Participation – Two federally funded TRIO programs at SJSU are Upward Bound and Educational Talent Search:

Upward Bound at SJSU is a federally funded TRiO project that seeks to provide academic support, career/degree information and guidance in the college-going process to eligible participants and their families. Through the Upward Bound program at SJSU, high school students have access to tutoring held in the Office of College Programs. There are also Saturday College Courses, after school development workshops, and summer courses. The Summer Literacy and Accelerated Math Academy offers students high school credit. All services, instruction, and materials are provided to eligible participants without charge, including college tours.

Educational Talent Search is a federally funded TRiO project that seeks to increase the number of youth from low-income or academically disadvantaged backgrounds who complete high school and enroll in post-secondary programs. This program at SJSU specifically targets the East Side Union High
School District and offers academic advising, tutorial referrals, college tours, college application assistance, help with financial aid application, SAT fee waivers, career exploration, workshops, and an Annual Parent Empowerment conference.

**Financial Aid and Scholarships** - It is the policy of the Financial Aid and Scholarship Office to first award all grant or scholarship aid for which a student may be eligible. If a student still has an unmet need or the student is not eligible for any grants or scholarships, either loans or Work-Study, or a combination thereof, will be awarded according to the student's preference as indicated on the FAFSA. Scholarships come from a number of different sources, including SJSU, private donors, alumni, and private industry. Awards are generally based on scholastic achievement and financial need. All students are encouraged to apply for as many scholarships as possible, to lessen their need for loans or part-time work to attend school. Students who want to apply for SJSU scholarships for the 2011-2012 academic year can do so online through the Spartan Scholarship Application.

**Recommendation:**
There was no information for this credit regarding programs to equip the institution’s faculty and staff to better serve students from low-income backgrounds. For future STARS submissions, further coordination with the financial aid department must occur to obtain a complete description for all financial aid programs at SJSU.

**Resources:**
Federal Trio Program: [http://www.sjsu.edu/pcp/](http://www.sjsu.edu/pcp/)
SJSU Financial Aid: [http://www.sjsu.edu/faso/Types_AID/](http://www.sjsu.edu/faso/Types_AID/)

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**Diversity and Affordability Tier Two Credits**

**Diversity Tier Two Credit 1: Gender Neutral Housing**

**Credit Criteria:** *Institution offers housing options to accommodate the special needs of transgender and transitioning students (either a matter of policy or as standard practice).*

**Assessment:**
According to the housing license agreement, provisions are made for transgender students to contact the residential life department to accommodate their needs. There is also a co-ed housing option available to students. The residence halls have some restrooms designated as gender neutral bathrooms and University Housing services is working towards making all restrooms gender neutral.

**Recommendation:**
While there is co-ed housing and other provisions available for transgender and transitioning students at SJSU, there are no programs specifically focusing on supporting the gender neutral students. Other universities have focused on advising and education programs specifically target to support transgender students.
Resources:
2011-2012 Student Housing License Agreement:

Diversity Tier Two Credit 2: Employee Training Opportunities

Credit Criteria: Institution makes cultural competence trainings and activities available to all employees.

Assessment:
Several training programs are offered to university employees. This general training series, HR 101, focuses on practical tools and techniques that have a positive impact on campus-wide systems and serves to enhance employee skills. Also offered are target specific trainings such as Harassment Awareness, Workplace Violence, and Disability Awareness trainings.

The Campus Climate, A.S. Personnel Committee, the Unity Council, the Faculty Diversity Committee, Veteran's/Military Student Task Force, and OEO Diversity Committee are among the various campus committees. HR partners with various organizations to coordinate campus-wide events such as the monthly Diversity Dialogs, New Student Welcome Receptions, Difficult Dialogs Trainings, and Intercultural Communication Workshops.

Resources:
SJSU Campus Contact: SJSU Human Resources
SJSU HR 101 Course List: http://www.sjsu.edu/hr/all_employees/advance/hr101/index.htm

Diversity Tier Two Credit 3: Student Training Opportunities

Credit Criteria: Institution makes cultural competence trainings and activities available to all students.

Assessment:
Workshops are offered through the SJSU MOSAIC program. Each workshop is created as necessary to meet the specific request and cover topics ranging from definition of Diversity, Social Justice, and Equity. Each of these workshops has had an experiential component (activity), with facilitated dialogue with concrete definitions and research for participants to take away. To have a workshop conducted, MOSAIC ask students, staff, or faculty to email or come by the Center with at least three weeks’ notice to prepare the agenda.

Human Resources

This category seeks to recognize institutions that have incorporated sustainability into their human resources programs and policies. This includes recognition for treating and remunerating their workers responsibly and fairly.

An institution’s people define its character and capacity to perform; and so, an institution’s achievements can only be as strong as its community. An institution can bolster the strength of its community by making fair and responsible investments in its human capital. Such investments include offering benefits, wages, and other assistance that serve to respectfully and ethically compensate workers. Investment in human resources is integral to the achievement of a healthy and sustainable balance between human capital, natural capital, and financial capital. In addition, this subcategory recognizes faculty and staff training and development programs in sustainability. Faculty and staff members’ daily decisions impact an institution’s sustainability performance. Equipping faculty and staff with the tools, knowledge, and motivation to adopt behavior changes that promote sustainability is an essential activity of a sustainable campus.

12.8 out of 19.8 possible points were earned in this category

PAE Credit 11: Sustainable Compensation

Credit Criteria: This credit recognizes institutions that take proactive steps to ensure their lowest paid workers earn sustainable compensation. Points are earned by institutions that evaluate and update their wages/benefits policies at least once every three years, to ensure total compensation for all on-campus workers enables employees to meet their basic needs.

Credit Calculation:
- 8 points earned since SJSU pays at a minimum the prevailing wage to 100% of employees

Assessment:
San José State University is a publicly-owned university which abides by the state and federal compensation requirements. SJSU has adopted policies and practices requiring compliance with Fair Labor Standards Act and to ensure sustainable compensation for its employees. SJSU’s practice is to ensure that every employee, including on site contractors, are paid minimum wage or a set amount above minimum wage, and to pay prevailing wages for job type and/or classification.
PAE Credit 12: Employee Satisfaction Evaluation

Credit Criteria: This credit recognizes institutions that take an active interest in the satisfaction of their employees by conducting a regular survey of employee satisfaction at least once every five years. The institution must have a mechanism in place to address issues raised by the evaluation.

Credit Calculation:

2 points earned for the American Council on Education Faculty Survey conducted in 2010

Assessment:
American Council on Education (ACE) Faculty Survey - The ACE/Sloan Project conducted and participated in two surveys which meet STARS criteria for this credit. The first survey focused on work/life balance for tenured and tenure-track faculty. The survey was administered one semester later to managers and staff at SJSU. The second survey focused on retention for tenure-track faculty. This survey was conducted by the Faculty Diversity Committee with support from the ACE/Sloan award. The ACE survey contained closed-ended and open-ended questions and was sent out to all tenured & tenure-track faculty in Fall 2009. The response rate was 45%. The survey was replicated with managers and staff in Spring 2010. The response rate for the second survey was 41%.

Recommendations:
The Survey results were not made available during the data collection phase. Results for this type of survey should be publicly posted with a corresponding list of ways in which SJSU is addressing obvious dissatisfaction issues.

Resources:
SJSU Campus Contact: AVP Faculty Affairs
Survey Results Links:
http://www.sjsu.edu/facultyaffairs/docs/Faculty_childcare_report_Fall_09.pdf

PAE Credit 13: Staff Professional Development in Sustainability

Credit Criteria: This credit recognizes institutions that offer training and/or other professional development opportunities in sustainability for their faculty/staff. Institution makes available training and/or other professional development opportunities in sustainability to all staff at least once per year.

Points Earned 2.0
Points Possible 2.0
Credit Calculation:

- **2 points earned** for having sustainability training and professional development opportunities at SJSU including:
  - Trainings provided through HR
  - Sustainability Matters Workshops
  - Environmentally Preferable Procurement Workshop
  - Transportation Solutions workshop series

Assessment:

**Human Resources:** The HR professional development programs include the Work-lead Cohort, the Administrative Professional Training Program, and HR 101 classes, which include skills development, sustainability, health and wellness, and special targeted trainings.

**Sustainability Matters Workshop:** The ‘Sustainability Matters’ workshop series was launched in 2009. It is a panel series covering different topics of sustainability at SJSU and is hosted by the Office of the President. The series is promoted throughout the university and is open to faculty and staff as well as students and the general public. These workshops enable the University community to come together to exchange information and ideas that encourage sustainable behavior. Topics covered in past workshops have included water conservation, climate change, SJSU ecological footprint challenge (http://www.myfootprint.org/sjsu/), and corporate sustainability.

**Going Green in the Office: Environmentally Preferable Procurement Workshop:** SJSU Staff, Department Chairs, and Administrators are invited to a discussion of Environmentally Preferable Procurement (EPP) and the adoption of green principles in purchasing at SJSU. Speakers encourage attendees to explore current SJSU policies, ways to adopt EPP into departmental purchasing, and examples of how EPP has affected specific departmental actions.

**Transportation Solutions:** SJSU Transportation Solutions provided a worship series available to all staff members in Spring 2010, which highlighted sustainable transportation options for staff members. Topics of the workshop included air quality, reducing automobile-source emissions, encouraging the usage of alternative transportation to SJSU, information on county transit system and direct bus and light rail lines to campus, incentives for transit, University transit pass (VTA Eco Pass), SJSU discounts and subsidies for regional transit, Commuter Check or pre-tax transit benefit program for employees, SJSU carpool program and regional rideshare matching system, bicycling to campus, campus bicycle parking facilities, and city and county bike routes.

**Recommendations:**
See the Employee Orientation recommendations in the credit below.

**Resources:**

**Human Resources:**
http://www.sjsu.edu/hr/staff/training/advance/index.htm

**Sustainability Matters Workshop:**
http://www.sjsu.edu/news/news_detail.jsp?id=3408
Environmentally Preferable Procurement:

PAE Credit 14: Sustainability in New Employee Orientation

**Credit Criteria:** This credit recognizes institutions that address sustainability issues during new employee orientation. Including sustainability in new employee orientation helps establish sustainability as an institutional priority and a part of the campus culture. Institution covers sustainability topics in new employee orientation and/or in outreach and guidance materials distributed to new employees, including faculty and staff.

### Credit Calculation:

- 0 points earned since sustainability issues are not fully addressed during new employee orientation

### Assessment:

There are different types of new employee orientations held at SJSU. The full time faculty orientation occurs once a year. The lecturer orientation is less extensive than the faculty orientation; it lasts 2 hours and occurs twice a year. The staff orientation is separate than faculty and lecturer orientation and is held by SJSU HR.

SJSU does not address any sustainability issues in any new employee orientation with the exception of alternative transportation options.

### Recommendation:

New Employee orientation should include information on how the new employee can interact with the sustainability practices and policies currently in place on campus, including such items as recycling requirements, alternative transportation options, green cleaning and purchasing policies, and how an employee may actively participate to further institute sustainability within their own departments as well as across the SJSU campus.

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PAE Credit 15: Employee Sustainability Educators Program

**Credit Criteria:** This credit recognizes institutions that coordinate programs in which faculty and staff members educate and mobilize their peers around sustainability initiatives and programs. In the program, employee sustainability educators are formally designated and receive formal training. The institution offers financial or other support to the program.

### Credit Calculation:

- 0 points earned
- Points Possible: 5.0
Credit Calculation:

- 0 points earned as no employees are being served by a peer sustainability outreach program

Assessment:
The Faculty Residence Program was conducted in 2009 but was not continued in 2010. Increased funding is needed for this program to continue and elevate itself so it meets the outlined criteria for this credit.

Recommendation:
Continued funding for the program is recommended. It was unclear during the data collection phase for the assessment how many faculty interacted with any sustainability support issues through the Faculty Residence Program. If the program continues, clearly define sustainability support components of the program and track how many faculty are benefiting from that support.

Human Resources Tier Two Credits

Human Resources Tier Two Credit 1: Childcare

Credit Criteria: *Institution has an on-site child care facility, partners with a local facility, and/or provides subsidies or financial support to help meet the child care needs of students, faculty, and staff.*

Assessment:
The Associated Students Child Development Center is primarily for the students of San José State University. Faculty and staff children will be admitted on a space available basis after student needs have been met. The program serves children aged six months through six years. Children are admitted from the waiting list on a first come, first served basis for full fee parents. Low income families are admitted with lowest income first priority.

- Approximately one half of the spaces are subsidized by the California Department of Education for low income student families. These families pay fees determined by the CDE based on monthly income and family size.
- Student parents who are not subsidized by the CDE still pay less than the full cost of care due to the Associated Student support of the child care program.
- Faculty and staff pay market rates for the area.

Recommendation:
The Child Development Center should be made fully available for all faculty and staff member that wish to have childcare available at their work place.

Resources:
SJSU A.S. Childcare Services: [http://as.sjsu.edu/ascdc/index.jsp](http://as.sjsu.edu/ascdc/index.jsp)
Human Resources Tier Two Credit 2: Employee Wellness Program

Credit Criteria: Institution has an employee assistance or wellness program that provides counseling, referral, and well-being services to employees.

Assessment:
San José State has an employee wellness program. In-house the program organizes wellness events that support healthy lifestyles, such as the Poker Walk and the Spartan Wellness Challenge. The wellness program also offers wellness lectures on topics such as weight management, lowering your blood pressure, stress management, and greening your commute. Counseling services are offered to SJSU employees through CONCERN EAP.

Resources:
http://www.sjsu.edu/hr/worklife/
http://www.sjsu.edu/hr/worklife/healthwell/

Human Resources Tier Two Credit 3: Socially Responsible Retirement Plan

Credit Criteria: Institution offers a socially responsible investment option for retirement plans.

Assessment:
SJSU offers pre-tax retirement investment options through TIAA-CREF. The investment choices include a CREF Social Choice account which gives special consideration to certain social criteria when choosing investments and only invests in companies that meet the screening criteria. Companies considered are those who: are stewards of the environment, devoted to serving local communities and society in general, committed to high labor standards, dedicated to producing high-quality, safe products, and those managed in an ethical manner.

Resources:
http://www.calstate.edu/hr/benefitsportal/tsa/
http://enroll.tiaa-cref.org/csu/
http://enroll.tiaa-cref.org/csu/inv_opt_multi_asset_ap.html
http://enroll.tiaa-cref.org/resources/ffs/194408605.pdf
Investment

This category seeks to recognize institutions that make investment decisions that promote sustainability. Most institutions invest some of their assets in order to generate income. Together, colleges and universities invest hundreds of billions of dollars. Schools with transparent and democratic investment processes promote accountability and engagement by the campus and community. Furthermore, institutions can support sustainability by investing in companies and funds that, in addition to providing a strong rate of return, are committed to social and environmental responsibility. Investing in these companies also supports the development of sustainable products and services. Finally, campuses can engage with the businesses in which they are invested in order to promote sustainable practices.

0.25 out of 16.75 possible points were earned in this category

PAE Credit 16: Committee Socially Responsible Investment

Credit Criteria: This credit recognizes institutions with an established and active committee on investor responsibility (CIR) with multi-stakeholder representation. Institutions for which investments are handled by the university system and/or a separate foundation of the institution should report on the investment policies and activities of those entities.

Institution has a formally established and active CIR or similar body that makes recommendations to the Board of Trustees on socially and environmentally responsible investment opportunities across asset classes, including proxy voting. The body has multi-stakeholder representation, which means its membership includes faculty, staff, and students and may include alumni, trustees and/or other parties.

Credit Calculation:
- 0 points earned for not having a SJSU Committee on Investor Responsibility

Assessment:
SJSU does not currently have any active body that reviews investment from an environmentally responsible view point.

Recommendation:
The University must first determine if sustainable investment is a priority regarding its overall approach to sustainability. While SJSU does not have complete control over all the investment dollars associated with the University, such as CALPERS, it is able to exercise some control over ASU and Tower Foundation investment policy; so if the University chooses, some measure of sustainable investment is possible. Consider having someone from the College of Business or other appropriate division sit on the Sustainably Committee to help provide sustainable investments recommendations to the Investment Chair. A simplified approach could be to hire an investment firm with environmentally responsible investment options and portfolios.
PAE Credit 17: Shareholder Activity

Credit Criteria: This credit recognizes institutions that use their investment power to promote corporate sustainability. This could take the form of withholding investments from companies or industries that are particularly unsustainable or engaging with companies in which they hold investments.

Two possible approaches to earning this credit:

1) Institution has filed or co-filed one or more shareholder resolutions that address sustainability, or submitted one or more letters about social or environmental responsibility to a company in which it holds investments, during the previous three years.

2) Institution has conducted a negative screening of its entire investment pool within the last three years. This could take the form of prohibiting investment in an industry or participating in a divestment effort. The negative screen includes selling all but $2,000 or less of the affected direct holdings and writing a letter to all fund managers encouraging them to remove affected holdings as well.

Assessment:
The following statement was forwarded to us regarding Tower Foundation investment policy: “The Tower Foundation Endowment Policy frames our investment work and establishes asset classes in a mix of common stocks, bonds, cash equivalents and other investments. Our investments in each class are passively made with each fund comprised of between ten to forty difference companies. The social responsibility clause in the endowment policy states that Tower Foundation’s Finance & Investment Committee, in collaboration with our investment advisory firm, must ensure that the social and ethical goals of the Tower Foundation are reflected in the portfolio. In this regard, the Committee may issue periodic restrictions on specific investments.”

While this statement provides the flexibility to determine if specific investment choices by the investing companies are acceptable, it does not directly address sustainability, as the Tower Foundation social and ethical goals do not address this. We could not determine if there was any screening done on specific portfolio investments regarding social or sustainable impacts from those investments.

Recommendation:
CALPERS is currently considering a sustainable investment policy for all its holdings. This policy should provide the basis for any sustainable investment policy SJSU is willing to impose on its own investments holdings such as the Tower Foundation and ASU financial investments.

Resources:

Some environmentally responsible investment companies:
http://www.winslowgreen.com/home/
http://www.greencentury.com/
**PAE Credit 18: Positive Sustainability Investments**

**Credit Criteria:** This credit recognizes institutions that seek positive investments that promote sustainability. Investing in Community development financial institutions (CDFIs) promotes sustainability by helping provide credit to individuals and communities who are under-served by conventional lending institutions. This credit uses a percentage of the total investment pool to provide a metric that is comparable between campuses without penalizing smaller investors.

**Assessment:**
See the assessment comments from the PAE IN credits 16 and 17. SJSU does not currently direct any specific investment in regards to sustainability promotion.

**Recommendation:**
While there is not a current program on campus for community development investment, it may be possible to consider financial investment for underserved student and graduate enterprises as part of the strong diversity program that already exists as SJSU. Consider working with the administrators or the campus Diversity Master Plan to develop a capital investment program for graduating students who are typically undeserved by banks and lending institutions.

**Investment Tier Two Credits**

**Investment Tier Two Credit 1: Student-Managed SRI Fund**

**Credit Criteria:** Institution has a student-managed socially responsible investment fund through which students are able to develop socially responsible investment skills and experience.

**Assessment:**
SJSU does not currently have any investment fund managed by students

**Recommendation:**
Consider developing a student-led, socially responsible investment program through the College of Business. STARS does not set a dollar amount on the fund so resources can be limited to start with, perhaps even tracking “virtual” investment to see how socially responsible investment might compare to standard market investment practices.

**Resources:**
SJSU College of Business: [http://www.sjsu.edu/cob/Faculty/homepage/](http://www.sjsu.edu/cob/Faculty/homepage/)
Investment Tier Two Credit 2: Socially Responsible Investment Policy

Credit Criteria: Institution has a policy or directive to consider the social and/or environmental impacts of investment decisions, in addition to financial considerations.

Assessment: See assessments from PAE IN 18

Recommendation: Consider developing a similar set of criteria for environmentally responsible investment.

Resources:
Forum for Sustainability Responsible Investment: http://ussif.org/

Investment Tier Two Credit 3: Investment Disclosure

Credit Criteria: Institution makes a snapshot of its investment holdings, including the amount invested in each fund and/or company and proxy voting records, available to the public.

Assessment: The investment foundations on campus do not directly control their investments and therefore do not currently make investment information publicly available.

Public Engagement

This category seeks to recognize institutions that give back to their communities through community service, engagement, and partnerships. Volunteerism and the sense of compassion that community services help develop are fundamental to achieving sustainability. From tutoring children to removing invasive species to volunteering at a food bank, students can make tangible contributions that address sustainability challenges through community service. Community engagement can help students develop leadership skills, while deepening their understanding of practical, real-world problems. Institutions can contribute to their communities by harnessing their financial and academic resources to address community needs. For example, faculty research and courses can focus on how to address community problems. In addition, colleges and universities can offer incentives for their graduates to pursue careers that fill community needs, and schools can use their prominence to advocate for sustainability outside of their institutions.
PAE Credit 19: Community Sustainability Partnerships

Credit Criteria: This credit recognizes institutions that have developed partnerships with their local communities to advance sustainability. Institution has formal partnership(s) with the local community to work together to advance sustainability within the community.

Credit Calculation:
- SJSU CommUniverCity leads several sustainability partnerships within the San José community

Assessment:
Established in 2005, CommUniverCity San José is a partnership of the Five Wounds/Brookwood Terrace communities, The University, and the City of San José. SJSU concentrates service-learning classes in these neighborhoods in cooperation with the Neighborhood Advisory Council and the City. The broad goal of CommUniverCity is to build community in the neighborhoods and engage students in civic life, while addressing the community development priorities identified by neighborhood residents.

References:
SJSU Campus Contact: Executive Director, CommUniverCity San José

Appendix:
See Appendix for more information on CommUniverCity

PAE Credit 20: Inter-Campus Collaboration on Sustainability

Credit Criteria: This credit recognizes institutions that have developed partnerships with their local communities to advance sustainability. Institution has formal partnership(s) with the local community to work together to advance sustainability within the community.

Credit Calculation:
- 2 points earned for SJSU partnerships with other institutions to advance sustainability

Assessment:
Opportunities for collaboration between SJSU and other universities have occurred at the AASHE 2010 conference, Sustainable Silicon Valley (SSV), and the “This Way to Sustainability” Conference held at CSU Chico.

At the AASHE 2010 conference in Denver, Colorado, the Director of Sustainability at SJSU, Katherine Cushing, along with three graduate students, presented the workshop “Measuring Change in Pro-Environmental Behavior: SJSU’s Ecological Footprint Challenge”. About 25 students, faculty, and staff
from universities across North America attended the session, entitled “Measuring Change in Pro-
Environmental Behavior: SJSU’s Ecological Footprint Challenge.” At this presentation, the SJSU
delegation was able to share with other institutions what SJSU learned about using an online ecological
footprint tool to reduce the impact of participating students, faculty, and staff by 10% over the course of
an academic year.

The Director of Sustainability at SJSU also is an active participant in Sustainable Silicon Valley (SSV), an
organization that partners policy makers, local businesses, and universities within Silicon Valley. As part
of her involvement with SSV, the director of Sustainability attended the SSV Summit conference at
Stanford University and moderated a panel entitled “Measuring for Impact and Success: Case Studies [in
organizational sustainability].”

At the CSU “This Way to Sustainability” conference held at CSU Chico in November 2010,
representatives from SJSU collaborated with other sustainability directors from most of the 23 CSU
campuses to craft a CSU-wide sustainability mission statement and climate change work plan. In
preparation for this conference, the Sustainability Director and Dean of the College of Science, Michael
Parrish, drafted a SJSU Sustainability Vision document which summarized current sustainability
practices at SJSU and outlined the organization’s vision for moving forward. This document was shared
with sustainability directors and coordinators from other CSUs who attended the conference.

SJSU maintains an extensive sustainability website where information can be found about sustainability
programs, initiatives, academics, research, events, and other resources.

Resources:
Sustainable Silicon Valley: http://www.sustainablesv.org/
CSU Chico Conference: http://www.csuchico.edu/sustainablefuture/conference/
SJSU Sustainability: http://www.sjsu.edu/sustainability/

PAE Credit 21: Sustainability in Continuing Education

Credit Criteria: This credit recognizes institutions that provide continuing
education courses and programs in sustainability to the community. Such
courses train community members in sustainability topics, help build knowledge
about the subject, provide the training people need to obtain and perform green
jobs, and offer professional recognition for sustainability training.

In Part 1, institutions earn 4 points when sustainability courses comprise 10 or more percent of all
continuing education courses offered. To calculate partial points, the percent of sustainability continuing
education courses offered is multiplied by a calculation factor of 40.

In Part 2, institutions with a sustainability-related certificate program through its continuing education or
extension department earn 3 points.

Credit Calculation:
Part 1:
Academic Year 2010/2011 number of courses with Open University students enrolled: 1,760
Academic Year 2010/2011 number of sustainability courses with Open University students enrolled: 106
Credit Calculation: 40 \times 106 \div 1,760 = 2.3 \text{ points earned}

Part 2:
- 0 points earned since SJSU does not have a continuing education sustainability-related certificate program.

Assessment:
SJSU does not have separate course listings for continuing education. Instead, non-degree seeking students are allowed to enroll in almost any SJSU courses provided they meet prerequisites and space is available. Therefore, an alternate method of calculating this credit was necessary. Based on conversations with AASHE staff, the number of sustainability-focused or -related courses in which any Open University students were enrolled was divided by the total number of SJSU courses with Open University students enrolled. This information was gathered with the support of the Office of Institutional Research’s database, and a detailed methodology is included in Appendix 2. This figure has increased slightly over the past five academic years (Table 3). Note that the total number of sustainability courses in which Open University students have enrolled in any of the past five years is 194, signifying that the courses taken vary from year to year.

Table 3: Number and Percent of Sustainability Courses at SJSU with Open University students enrolled

<table>
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<td>1,704</td>
<td>2,151</td>
<td>2,095</td>
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<tr>
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<td>5.8%</td>
<td>5.4%</td>
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</tr>
</tbody>
</table>

Resources:
SJSU Open University: [http://ou.sjsu.edu/](http://ou.sjsu.edu/)

Appendix:
See Appendix for list of sustainability courses at SJSU in which Open University students have enrolled during the past five academic years

PAE Credit 22: Community Service Participation

Credit Criteria: This credit recognizes institutions that engage their student bodies in community service, as measured by how widespread participation is at the institution. Volunteerism and the sense of compassion that community services help develop are fundamental to achieving sustainability. From tutoring children to removing invasive species to volunteering at a food bank, students can make tangible contributions that address sustainability challenges through community service. The credit is measured...
by the percentage of students who participate in community service. Institutions may exclude non-credit, continuing education, and/or part-time students from this credit.

Credit Calculation:
1 point earned for every 16.67% of student population engaged in community service.
- YR ’09/’10 number of students engaged in community service: 5133 students
- YR ’09/’10 total number of full-time students: 21,326
- Percent of students engaged in community service: 5,133 ÷ 21,326 = 0.24 (24%)
- Points Calculation: 6 x 0.24 = 1.44 points

Assessment:
Approximately 24% of SJSU students participate in community service. This engagement is managed and tracked by the SJSU Center for Community Learning and Leadership (CCLL). The reporting information tracks student participation in Service Learning Courses. This is not unique to SJSU; all other CSUs track the Service Learning courses. The report is a generic form and simply states the hours served but does not give specifics on the courses and what type of services were performed.

It can be assumed that much more community service occurs at SJSU through various clubs and student activities; however, these hours are not tracked by the CCLL.

Recommendation:
If there is agreement that community service participation can strengthen the overall sustainability commitment and goals of the campus, then this credit might help to formulate some specific focus on campus volunteerism. Some institutions require clubs and student run programs to annually report their level of community service. This requirement would most likely increase the total confirmed percentage of the overall campus community services engagement.

Additionally the University might consider focusing on volunteer programs that direct community service activities towards sustainable outcomes within the community. Green Wave is one such program that already exists, with excellent sustainable results for both the community and the students who participate in it.

PAE Credit 23: Community Service Hours

Credit Criteria: This credit recognizes institutions where many students devote time to community service. Institution engages students in community service, as measured by average hours contributed per full-time student per year. Institutions may exclude non-credit, continuing education, and/or part-time students from this credit.

Credit Calculation:
Points earned based on average hours of community service per student.
- Number of community service hours: 119,084 students
- Total number of full-time students: 21,326

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<th>Points Earned</th>
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<td>Points Possible</td>
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</table>
Average community service hours per student: 119,084 ÷ 21,326 = 5.584 hours
Points Calculation: 0.3 x 5.584 = 1.68 points

Assessment:
See notes from PAE PE credit 22 above

PAE Credit 24: Sustainable Policy Advocacy

Credit Criteria: This credit recognizes institutions that have promoted sustainability through public policy advocacy. There are myriad public policies for which institutions can advocate that address sustainability, including policies specific to higher education. Institution advocates for federal, state, or local public policies that support campus sustainability or that otherwise advance sustainability.

Credit Calculation:
- 4 points earned for SJSU advocating policies to advance sustainability

Assessment:
SJSU advocates for sustainable policies within all levels of government. Examples of recent SJSU events supporting sustainable policies are:

Federal Advocacy – U.S Congresswoman visit SJSU: In observance of Earth Day, 30 SJSU students met on SJSU campus with U.S. Congresswoman Zoe Lofgren. The event was sponsored by the SJSU Environmental Resource Center, the Office of the President's Sustainability Initiative and Environment California. The discussion centered around identifying pathways and actions that Congress and individuals can take to accelerate the national debate on mitigating greenhouse gas emissions.

Federal Advocacy – Gulf Coast Civic Works Act: Since Hurricane Katrina, SJSU Sociology Professor Scott Meyer-Lipton has been active in a national effort to pass federal legislation entitled The Gulf Coast Civic Works Act. If passed, this Act would create a minimum of 100,000 prevailing wage jobs and training opportunities for local and displaced workers on infrastructure projects to restore the coastal environment using emerging green building technologies. HR 4048, legislation introduced by U.S. Congresswoman Zoe Lofgren, is based on the Gulf Coast Civic Works Project, which was founded at San José State in November 2006. Professor Myers-Lipton wrote the original proposal for the project, and his students followed up by building a national network of college students and faculty supporters.

State Advocacy – Prop 23 Debate: On October 21, 2010, SJSU sponsored Proposition 23 Debate. Over 250 students, faculty, staff, and community members attended the event. Campus organizers worked with Environment California to run “No on Prop 23” campaign. If enacted, Proposition 23 would have suspended California’s landmark legislation AB 32 and thereby ended the regulation of greenhouse gas emissions at the state level. In November 2010, the proposition was defeated by a 23% margin. The event attracted more than 280 attendees, which included students, faculty, staff, and members of the public.
Local Advocacy – Hosting SSW EcoCloud: In Spring 2010, the University hosted the quarterly SSV EcoCloud Event. EcoCloud represents a consortium of universities, private companies, NGOs, municipalities, and utilities applying principles of industrial ecology to Silicon Valley. For the past year, the SJSU Director of Sustainability has been actively involved in conversations with representatives from the City of San José, the Santa Clara Valley Water District, Sustainable Silicon Valley, and the CA Department of Water Resources, specifically about reporting and analysis tools that could be used for scenario planning related to sustainable integrated water resource management. SJSU is one of the leading partner agencies leading work on this project, along with SSV and Stanford.

Resources:
Gulf Coast Civic Works Act: http://www.sjsu.edu/people/scott.myers-lipton/publications/
Gulf Coast Civic Works Act: http://www.sjsu.edu/news/releases/releases_detail.jsp?id=2670
SSV EcoCloud: http://ecocloud1.ning.com/page/water-policy-planning

PAE Credit 25: Trademark Licensing

Credit Criteria: This credit recognizes institutions that join a monitoring and verification organization to help ensure that apparel bearing the institution’s name is produced under fair conditions. Points earned for being part of the Fair Labor Association or the Workers’ Rights Consortium. Points earned for signing on to participate in the Designated Suppliers Program.

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<tr>
<td>Points Possible</td>
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Credit Calculation:
- 2 points earned for SJSU Athletics Logo licensing department being part of the Fair Labor Association
- SJSU Athletics Logo licensing department is not part of the Workers’ Rights Consortium

Assessment:
There are various departments on campus that manage the licensing of SJSU apparel bearing the university logo. The SJSU athletics logo licensing is controlled by a separate office than the general university logo.

The athletics logo licensing is managed on campus by the Director of Equipment Services, Branding and Licensing. SJSU athletics logo licensing is signed up as part of the Fair Labor Association (FLA). SJSU Athletics was also previously a part of the Workers’ Rights Consortium (WRC), but decided to discontinue membership dues to fees required to stay affiliated with the WRC organization.

Logo licensing for the general SJSU logo is harder to track. Apparel bearing the logo on campus is sold through the Spartan Bookstore. The Spartan bookstore is operated by Barnes & Noble College
Booksellers. It is uncertain whether SJSU has direct control over their memberships with the FLA and WRC.

**Recommendation:**
It is not uncommon for Universities to only be part of either the FLA or the WRC and not both. Association with the FLA appears more common than association with the WRC. However, to earn full STARS credit, the institution must commit to participate in the Designated Suppliers program which is part of the Workers' Rights Consortium.

**Resources:**

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**Public Engagement Tier Two Credits**

**PAE Tier Two Credit 1: Graduation Pledge**

**Credit Criteria:** *Institution administers a graduation pledge through which students pledge to consider social and environmental responsibility in future job and other decisions.*

**Credit Calculation:**
- 0 points earned since SJSU does not have a graduation pledge addressing sustainability

**Recommendation:**
This credit is pursued by about one third of all STARS rated four year institutions. None of the STARS rated California public universities are currently seeking this credit.

Most institutions that have pursued this credit seek compliance by offering a pledge for students that can be completed prior to graduation ceremony. This graduation pledge is made by either signing a card or sending consent to a pledge via email. Once students have committed to the pledge, Universities typically hand out something along the lines of a green pin or sash that can be worn by students during graduation to identify that they have made a pledge to sustainability. Some Universities offer a pledge card that students may sign and keep in their wallets as a reminder about their pledge to sustainability.

Santa Clara University meets the requirements of this credit through their student chapter of the Graduation Pledge Alliance (GPA). Through this organization seniors at Santa Clara University are given the opportunity to sign a pledge to sustainability either online or at organized events.

**Resources:**
- Graduation Pledge Alliance - [http://www.graduationpledge.org/](http://www.graduationpledge.org/)
PAE Tier Two Credit 2: Community Service on Transcripts

Credit Criteria: *Institution includes community service achievements on student transcripts.*

Credit Calculation:
- **0 points earned** since SJSU does not record community service on student transcripts

Assessment:
Currently tracking of community service is conducted through the SJSU Center for Community Learning & Leadership (CCLL). While this office tracks the number of students enrolled in service learning courses, this information is not recorded on student transcripts.

Recommendation:
Cal Poly Pomona and CSU Channel Islands are two STARS institutions that meet criteria for this credit. Similar to SJSU they both offer service learning courses on campus that include a community service element. To qualify for STARS credit, these institutions provide an indication next to the listing of the Service Learning course on the transcript which also specifies that the student fulfilled the community service requirement as part of their coursework. This is something that SJSU can work to implement on their transcripts.

PAE Tier Two Credit 3: Farmers Market

Credit Criteria: *Institution hosts a farmers’ market for the community.*

Credit Calculation:
- **0 points earned** since SJSU does not host a farmers market for the university

Recommendation:
Other California STARS institutions that either host or participate in local farmers markets are UC San Diego (UCSD), Cal Poly Pomona, and Cal State Channel Islands (CSUSI). USCD hosts a farmers market on campus once a week, bringing in local growers to sell their goods. Cal Poly has its own agriculture program and therefore participates in farmers markets with the products from the campus orchards, nursery, and apiary. CSU Channel Islands has a unique approach: they partner with a local farm to have fresh produce delivered to campus in boxes. Then members of the Community Supported Agriculture (CSA) program on campus can pick up the boxes of produce from the campus.

Since SJSU is an urban campus and does not have an agriculture program, SJSU is better off taking an approach similar to UCSD or CSU Channel Island. The city of San José currently has a farmers market. SJSU could potentially see if the same participants in that farmers market would like to hold an additional weekly farmers market on the SJSU campus. Otherwise, there are also local farms within the San José area that could possibly be interested in partnering with the University to deliver fresh produce to campus.
Resources:
UCSD Farmers Market:
http://students.ucsd.edu/student-life/_organizations/student-involvement/events/farmers-market.html

Cal Poly Pomona:
http://www.csupomona.edu/~farmstore/farmers-market.shtml

CSU Channel Islands:

Downtown San José Farmers Market:
http://www.sjdowntown.com/FarmerMarket.html#programs

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Category 4: INNOVATION

These credits recognize institutions that are seeking innovative solutions to sustainability challenges and demonstrating sustainability leadership in ways that are not otherwise captured by STARS. The following criteria must apply:

- Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
- In general, innovation credits should have roughly similar impacts or be on the same scale as Tier One credits.
- The innovative practice, policy, program, or outcome should have occurred within the past three years.
- The innovative practice or program has to be something that the institution has already done; planned activities do not count.
- An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted.
- Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g., being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
- Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
- While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit.
- Outcomes, policies, and practices that are innovative for the institution’s region or school type are eligible for innovation credits.
- When the innovation is part of a partnership, the summary provided must clearly describe the institution’s role in the innovation.
Innovation Credit 1: Dr. Martin Luther King Jr. Library Community Partnership

Credit Criteria:
The Community Partnership between SJSU and the City of San José in their joint management of the Dr. Martin Luther King Jr. Library is both unique and noteworthy. While many higher education intuitions seek town and gown relationships and open their campus grounds and buildings to some limited public use, the joint collection approach and full access to Library facilities and programs by both sides is rarely achieved. SJSU is to be commended for their efforts to collaborate with the City. This program alleviates the requirement to build separate but equal library facilities in the same city, as well as benefit from the joint use of the excellent collections from both sides.

Assessment:
DR. MARTIN LUTHER KING JR. LIBRARY COMMUNITY PARTNERSHIP PROGRAM:

The vision of San José State University and the City of San José to partner successfully and establish a unique jointly-operated library, the largest of its kind in the world, clearly demonstrates the University’s commitment and dedication to implementing innovative strategies to better serve our students, staff, faculty, and the greater community of San José. Ever since its doors opened, the library has been a stellar example of enhancing the town and gown relationship. Open since 2003, this merged library continues to draw over 72,000 visitors in an average week. As of 2007, it was the largest library building in the western United States built in a single construction project with over 475,000 square feet (44,000 m²) of space on eight floors and approximately 1.6 million volumes (see attachment Introduction to King Library). As a result of this partnership, the library provides the following services for any of its patrons who hold a San José Public Library card. Cards are available to all residents in the state of California and to all students, staff and faculty of San José State University.

- Access for all San José residents to the academic collection of materials from the SJSU Library.
- Access for SJSU students to the books, movies, and music in the public library’s collection in all 19 locations.
- Delivery of any book from the academic or public collection at King Library to any library user at their local branch library.
- Access to academic databases for visitors to the King Library, including business databases, streaming video and music.
- Access to joint events and exhibits for the City and University.
- Access to specialized collections to everyone at the King Library, including: SJSU Special Collections and Archives, the Beethoven Center, the Steinbeck Center, California History Room, the Dr. Martin Luther King, Jr. Civil Rights Collection, the Portuguese Heritage Collection.
Endowment (established in partnership with the Portuguese-American community), and the Cultural Heritage Center.

Also of note is the University Library’s Digital Library Initiative which supports a strong commitment to increasing access, creation and use of digital collections, including unique special collections. This effort makes it possible for anyone across the globe with internet access, regardless of whether they are affiliated with King Library, to have access to the King Library Digital Collections. This collection represents rare and unique materials held by San José State University Special Collections and the San José Public Library's California Room. The collections document the history of the Santa Clara Valley from its agricultural beginnings to the high-tech boom and formation of the Silicon Valley. The range of subjects covered include local politics, social and cultural traditions, education, local business and industry, and historical events. This digital library will stimulate discovery of the rich and diverse resources of the library and will promote new scholarship from our community (see http://digitalcollections.sjlibrary.org/).

COLLABORATIVE BENEFITS  Unlike other libraries, the entire community benefits on an ongoing basis from enhanced services and opportunities from unique grants (see attachment Major and Minor Grants). Building upon the collaboration, the SJSU School of Library & Information Science and the National Hispanic University joined forces with the King Library and was awarded an Institute of Museum & Library Services grant for over $943,000 to recruit and educate fifteen students of color to become librarians by offering them full scholarships and living stipends. These graduate students have been mentored throughout the program, entitled “Preparing a New Generation of Librarians to Serve Our Communities” and have since graduated and entered the library profession, serving the needs of diverse communities and prepared to serve as leaders throughout their careers (see attachments IMLS students and IMLS Grant Grads).

PROGRAMS AND COMMUNITY OUTREACH  The collaboration has created a unique opportunity for relationships to develop and grow between members of the University (students, faculty, and staff) and city and university library personnel. This partnership has incubated and implemented innovative programs which otherwise would not have necessarily transpired and which support the three E’s of sustainability: economy, ecology, and equity. Below is a selected sample of the programming and classes provided by King Library in 2010/2011.

Economy
- Bankruptcy Clinic
- Computer Lab for your Job Search
- Tax Help with VITA
- Small Business Tax Assistance
- Finding Hidden Jobs
- SSA Benefits Workshop

The Library also has several major ongoing programs in place offering assistance to the public including Social Workers in the Library (free advice and referrals available on a monthly basis), (see http://www.sjpl.org/blog/social-workers-library), Lawyers in the Library (free legal consultation available weekly), (see http://www.sjpl.org/event/lawyers-library), and Partners in Reading, a literacy program (see attachment Partners in Reading). What is unique about the literacy program is the unexpected extent of its outreach into the SJSU community. A cohort of University custodians is enrolled in the program, taking full advantage of the opportunity to advance their literacy skills and enhance personal
development. Additionally, individual SJSU faculty and students have become engaged and regularly volunteer as literacy tutors for the San José community.

Ecology
- Smeltertown (environmental impact of living near an iron smelter)
- Plant Life (slides & lecture on the San José Water Pollution Control Plant)
- Mr. Swan’s Big Idea: A Transportation, Environment, and Energy Solution (part of the University Scholar Series)
- Get Green book talk (communicating environmental concepts to youth) (part of the University Scholar Series)
- Cool Cuisine: Taking the Bite out of Global Warming (part of the University Scholar Series)

Equity
- Staff Training for serving the Homeless (this was a staff only program)
- Angel Island: Immigrant Gateway to America
- San José Japantown: A History Book Project

Programs addressing equity are a major focus for the King Library. One example, the annual Silicon Valley FACES Dr. Martin Luther King, Jr. Contest, is designed to keep the memory of Dr. King’s lessons of social equality and non-violence alive for new generations of youth. Utilizing Dr. King's own words, the contest focuses the students' creativity on social justice issues which align with Silicon Valley FACES mission of building an inclusive and caring community free of bias and bigotry. This year, the students interpreted his words, "...I have the audacity to believe that peoples everywhere can have three meals a day for their bodies, education and culture for their minds, and dignity, equality and freedom for their spirits." These entries were displayed at the Cultural Heritage Center, 5th floor, a space in the King Library dedicated to celebrating the diverse cultural history and achievements of the community. Also in the past year, the University Library hosted the Opera San José company in a series of previews of their season performances made freely available to the entire San José community, bringing culture and enrichment to all and providing an opportunity for economically-challenged community members and their families to experience the arts.

In addition to innovative programs, the King Library boasts four exhibit spaces, two of which are booked through 2013 and 2014, respectively. The merged library is a magnet for artists and community leaders interested in educating the public with historical and socially important exhibits (see attachment: King Library Exhibits 2008-present).

In the past few years alone, exhibits included:
- Pride & Passion: The African American Baseball Experience
- Peregrine Falcons
- Passion for Life: Day of the Dead in Mexico
- From Our Land (the Nikkei people of Japanese ancestry: agricultural success and anti-Japanese sentiment)
- Legacy of Quran
- Earth Work: Mining Burkina Faso David Pace Exhibit
- Soul Sanctuary: Antioch Baptist Church 1893-2010
Lastly, in regards to the ecology of sustainability, the King Library building itself was designed and built to meet Leadership in Energy and Environmental Design (LEED) standards as a “green” building (see attachment: Going green at the library). Green efforts are ongoing, as library employees have formed a “green team” to ensure that staff members are educated through email, workshops, and a blog on ways they can contribute to the sustainability effort, both in the workplace and in the home.

**Innovation (IN)**

**Innovation Credit 2: Green Wave**

**Credit Criteria:**
The Green Wave Program is unique in that it combines a strong training program for those students interested in sustainability focused careers, with an excellent energy reduction program for the local community. Few higher education institutions achieve both hands on teaching in sustainably focused careers programs and community based energy reduction in the same program.

**Assessment:**
The Green Wave program is an innovative energy audit program that trained 72 undergraduate and graduate students during the Spring 2011 semester to conduct residential, office, and dorm room energy check-ups (audits) for the SJSU community and City of San José employees. In partnership with the City of San José’s Environmental Services Department and the environmental group Acterra, students completed 24 hours of training on topics ranging from climate change to determining rooftop photovoltaic potential. They learned about ways to increase residential and office energy efficiency by showing auditees how much energy their individual appliances and devices were using, helping them interpret their monthly utility bills, installing energy saving SmartStrips and CFLs, and discussing outlet gaskets.

Just as importantly, the students educated residents on the City’s Green Vision, specifically highlighting the goals of reducing per capita energy use by 50% and the creation of 25,000 Clean Tech jobs. Acterra led the hands-on residential audit training, the City secured guest speakers from within the Clean Tech and energy sectors to provide industry insights, and the SJSU Green Wave team provided additional lectures, dorm and office audit educational materials and training, proficiency exams, recruitment and marketing, data management and analysis, and overall program support.

**Green Wave Objectives:**

- To engage a broad spectrum of students, faculty, staff and alumni, and City employees in a program that brings energy-use and climate change into everyday discussions.
• Provide an educational experience that will prepare SJSU students for careers in the green sector by arming them with hands-on skills and sustainability literacy.

• To produce quantifiable reductions in energy use on the SJSU campus by providing education to the campus community about the impacts of individual behaviors and actions.

• Facilitate the transference of knowledge from academia to the general public, with the students being messengers who can communicate in simple, accessible language.

• Increase awareness of the City of San José’s Green Vision and directly contribute to the achievement of the goals of reducing per capita energy use and increasing Clean Tech jobs.

Between March and May of 2011, 72 students completed 220 free energy check-ups for over 300 community members within San José’s borders. The effort included students from five academic departments representing more than 10 different majors, including Environmental Studies, Communication Studies, Meteorology, Urban and Regional Planning, Geology, Music, Management Information Systems, and Biology. The direct impact from these audits is estimated at an annual savings of 175,000 kWh of electricity, $37,000 and 92,000 lbs of CO₂.

Research indicates that several of the main obstacles to getting citizens engaged in pro-environmental behavior include feeling that environmental concerns do not relate to them, feeling like individual actions do not make a difference, lack of knowledge, difficulty of breaking existing habits, and lack of issue salience. Feedback from auditees showed that the students were able to communicate the importance of individual actions.

“This was a wonderful experience. It helped me see that I have already done some things to lower my carbon footprint, but they were able to point out some areas I didn’t even know about.”

“(The students) suggested I install a hot water heater blanket, which I did the very next day. It worked so well that I had to turn the hot water heater thermostat down. This will not only help reduce my utility bill, but also lessen my carbon footprint!”

“(The students) were extremely knowledgeable and communicated information in an accessible manner. I consider myself fairly informed about energy conservation and I learned so much in my audit. They answered my questions respectfully and completely.”

“I learned quite a bit from the students. There is still room for me to improve on energy conservation. Since we are just a tad into tier two for electrical, with some effort we can bring it down to tier one.”

The Green Wave was recognized by the Center for Community Learning & Leadership for its successful partnership with the City of San José, Actera, & many SJSU departments. The Community Engagement and Service Learning Awards recognize individuals and projects that effectively integrate meaningful service that addresses community needs, along with academic learning. Green Wave student auditors and program coordinators also received a commendation from Mayor Chuck Reed in appreciation of their work supporting the City’s Green Vision.
## Appendix

### STARS SJSU Campus Contacts – Spring 2011

<table>
<thead>
<tr>
<th>Role</th>
<th>Primary Contact</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Team Consultants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Administrator – Davis Langdon</td>
<td>Cynthia Hughes-Doyle</td>
<td>310-463-6445</td>
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</tr>
<tr>
<td><strong>SJSU Campus Contacts</strong></td>
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</tr>
<tr>
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