

# Resilient CSUSB

2018 – 2023 Plan Draft 04/13/2018

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### **Resilient CSUSB**

In April 2017, California State University, San Bernardino (CSUSB) took significant steps towards fostering a more sustainable future with the establishment of an Office of Sustainability. With a vision to build, operate, and nurture a healthier more resilient community for the San Bernardino and Palm Desert campuses, the emerging Office of Sustainability began to develop the Resilient CSUSB Plan. The goal of this plan is to provide a framework for our community to consider the economic, environmental and social impacts of our activities and to offer guidance for how we evolve in the face of emerging challenges. The framework for the plan was presented to the CSUSB community in the fall of 2017 in an effort to gain input from the student, faculty and staff. Using a collaborative, community-based approach the plan expanded to include initiatives set forth in the Second Nature Resilience commitment signed in December 2017 by President Morales.

To ensure campus wide engagement in the planning process, Resilient CSUSB is built around Roadmap Working Groups that focus on Energy, Water, Food & Waste, Education & Community, Transportation & Mobility, and Buildings & Land Use. Group members consist of students, faculty, staff and community members who are charged with identifying specific strategies, actions, timeframes and resources that are necessary to meet Resilient CSUSB goals. In addition to the Roadmap Working Groups, there are two Taskforce Committees; one at the San Bernardino campus and one at the Palm Desert Campus. The Taskforce committees reviews the progress of each Roadmap Group and disseminates their findings and recommendations to decision makers including CSUSB President Morales. As recommendations are developed, the Office of Sustainability staff assist both the Working Groups and Taskforces with ensuring each recommendation aligns with the CSUSB Strategic Plan, the Second nature commitment and California State University system-wide policies.

The next steps for Resilient CSUSB involve implementation of the plan. Continued efforts from the Roadmap and Taskforce groups will be needed in order to realize the plan. These groups will refine actions and timelines moving forward as well as assisting in identifying the necessary resources to implement the plan.

The Office of Sustainability will also create The Resilient CSUSB Portal. This tool will provide ongoing reporting, intake of new ideas and points of refinement, and educational and programmatic outreach to keep the plan vital and successful.

The Office of Sustainability invites all within the San Bernardino and Palm Desert campuses and surrounding communities to review this plan. Additionally, we encourage ongoing participation and feedback as we continue to define our sustainable future.

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### Vision:

Resilient CSUSB collaboratively builds, operates, and nurtures a healthier more resilient community.

### Mission:

Resilient CSUSB is our roadmap for building, operating, and nurturing a healthier more resilient community for the San Bernardino and Palm Desert campuses. We achieve resilience in our community using the over-arching themes of education, economy, and equity.

### Core Value Alignment:

The core values set forth in the Strategic Plan for California State University, San Bernardino are those that are shared by Resilient CSUSB. Through both the planning and implementation of Resilient CSUSB, the core values of the University are achieved.

### *INCLUSIVITY*

We affirm and are committed to the value of all kinds of differences among students, faculty and staff. Inclusivity that is broad and deep makes us a healthier and more productive organization and builds a culture that fosters engagement and diverse perspectives.

#### INNOVATION

We support and believe in an innovative culture and attitude that fosters the creative and deliberate application of teaching, research, scholarship and service for effective education.

#### INTEGRITY

We affirm and are committed to the truth. We demonstrate our integrity by being ethical, matching what we say with what we do, and by ultimately taking responsibility for our actions.

#### RESPECT

We believe in and are committed to the virtue of respect and will treat everyone with courtesy and kindness.

### SOCIAL JUSTICE and EQUITY

We believe in, affirm, and are committed to the equal value and dignity of all people. Fairness and equity are more than equality. We actively seek to eliminate barriers for those who are disadvantaged and disempowered so they may participate fully in university life.

### Core Value Alignment:

### **SUSTAINABILITY**

We affirm and are committed to the sustainability of our university by forward thinking, learning from both successes and mistakes, being proactive in moving our university forward, and by providing opportunities for continued growth and development.

#### TRANSPARENCY

We affirm and are committed to the importance of transparency both internally and externally. We believe in honesty and openness in our decisions and processes, subject to legal and ethical confidentialities. Understanding we are a public institution, we are also up front and open to the community and residents that we serve about the decisions we make and the actions we take.

#### WELLNESS and SAFETY

We affirm and are committed to protecting and enhancing the health, wellness and safety of ourselves, our colleagues, our students and our stakeholders. We believe a healthy university is one in which there is collegial collaboration and uses continuous improvement processes that ensure a safe and healthy workplace for all.

### Resilient CSUSB Goals:

- Goal 1: Net Zero Energy Campus
- Goal 2: Net Positive Water Campus
- Goal 3: Net Zero Waste Campus
- Goal 4: Access to Healthy and Sustainable Food
- Goal 5: Increase Average Vehicle Ridership (AVR) from 1.1 to 1.25
- Goal 6: Develop Sustainability Awareness through Education & Outreach



# Roadmap Energy

### Goal 1: Net Zero Energy Campus

Both the San Bernardino and Palm Desert campuses will produce on-site the energy required for campus operations on an annual basis.

Strat	egy	Action	Campus	Duration
		Conservation Related Focus		
		1-1-1 Intern focused work to research other successful higher education programs and resources useful to build an energy conservation program. Started 11/20/17.	San Bernardino / Palm Desert	Less than 1 year
1-1	Research other institutions and	1-1-2. Evaluate the conversion of fluorescent fixtures to LED. Evaluate cost impact and energy savings with regards to the conversion.	San Bernardino / Palm Desert	2-3 years
1-1	sources for program and project ideas	1-1-3. Evaluate power consumption and life cycle of computers and other equipment across campuses. Adopt recommendations of efficient equipment into a procurement policy.	San Bernardino / Palm Desert	2-3 years
		1-1-4. Evaluate business process re-engineering (BPR) to identify efficiencies that will lead to conservation of resources.	San Bernardino / Palm Desert	2-3 years
		Energy Efficiency Related Focus		
1-2	So Cal Edison Building Audits	1-2-1. Through the IOU/CSU/UC Partnership, Southern California Edison (SCE) is offering free American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Level 2 audits. The SB Library and all 3 Palm Desert Buildings first to audit as a test. Need to evaluate value of final first set of audits then create a staging list for next audits.	San Bernardino / Palm Desert	4-5 years
1-3	Implementation of a cross-campus Energy Information System (EIS) with progressive Monitor Based Commissioning	1-3-1. As part of the Chancellor's office master enabling agreement (MEA), work toward installation and implementation of the SkySpark platform. Solicit and decide on management framework (like EcoVox). Get each building metered and select some buildings for sub metering. Funding to be coordinated with rebates, incentives, and the Chancellor's Office.	San Bernardino / Palm Desert	2-3 years
	(MBCx) program	1-3-2. Obtain proposal for the SkySpark Energy Information System (EIS) and identify funding resources to implement.	San Bernardino / Palm Desert	Less than 1 year
		1-3-3. Convert existing ION energy meters to operate universally across multiple platforms so that they can be integrated into the SkySpark EIS.	San Bernardino / Palm Desert	Less than 1 year

# Roadmap Energy

Strat	egy	Action	Campus	Duration
		Energy Efficiency Related Focus		
1-3	Implementation of a cross-campus Energy Information System (EIS) with progressive Monitor Based Commissioning	<ul> <li>1-3-4. Convert existing building controls from pneumatic to direct digital. There are 9 existing buildings that need to be converted in order to have the entire campus building controls integrated into the EIS.</li> <li>1-3-5. Identify and implement a lighting control system for interior and exterior lights to be</li> </ul>	San Bernardino San Bernardino /	
	(MBCx) program	integrated into the EIS.	Palm Desert	
		Production / Renewable Related Focus		
		1-4-1. National Renewable Energy Lab (NREL) Net Zero Energy team will provide a plan for each campus for renewable energy projects and strategies.	San Bernardino / Palm Desert	Less than 1 year
1-4		1-4-2. Circuitry/infrastructure into the campus doesn't appear to support significant renewable installation. SCE to provide a report of current service/capacity, when it will likely change, and how we can proceed with a renewable energy plan.	San Bernardino / Palm Desert	Less than 1 year
1-4	NREL assessment	1-4-3. Keep up with Chancellor's Office MEA for Solar.	San Bernardino / Palm Desert	Less than 1 year
		1-4-4. NREL will also provide a high level (by percentage) estimate of what goals in reduction through energy efficiency and conservation and what goal for production the campus should shoot for to achieve Net Zero Energy Campus.	San Bernardino / Palm Desert	Less than 1 year
Gene	ral Focus			
1-5	Develop Energy Strategic Plan (Policy Requirement)	1-5-1. The requirements are open from the Chancellor's Office. We have some documentation/guides from SCE. Also NREL should provide some clues as to how to approach this. The general feeling of the Roadmap Working Group will be it will be made up of the Roadmap with some formatting to fulfill the requirement. It's basically an opportunity to bring it all together across Conservation, Energy Efficiency, and Production as found in the Roadmap.	San Bernardino / Palm Desert	2-3 years



Electrical Consumption on Campus

# Roadmap Water

### Goal 2: Net Positive Water Campus

Water will be used efficiently and returned to be used as a positive resource.

Strat	egy	Action	Campus	Duration
		Conservation Related Focus		
		2-1-1. Intern focused work to research other successful higher education programs and resources useful to build a water education/conservation program.	San Bernardino / Palm Desert	Less than 1 year
		2-1-2. Sustainability Week participation focusing on water conservation Including workshops and seminars.	San Bernardino / Palm Desert	1 year
		2-1-3. SOAR / Coyote First Steps orientation on water conservation practices to use at CSUSB and at home. Include in-person seminar / workshops as well as an ongoing short video series.	San Bernardino / Palm Desert	2-3 years
2-1	Education to Campus Community,	2-1-4. Regularly update campus and community on Resilient CSUSB progress using a combination of seminars, video presentations, and implementation of a live dashboard showing utility savings / consumption including water.	San Bernardino / Palm Desert	1 year
	Reporting and Events	2-1-5. Mandatory short on-line training required on water conservation in order to register every Spring quarter. This can also apply to Faculty / Staff as required on-line training.	San Bernardino / Palm Desert	1-2 Years
		2-1-6. Water conservation competition between housing units within the campus. Requires sub- metering of housing units.	San Bernardino / Palm Desert	5 years
		2-1-7. Develop and launch a mobile app that displays real-time dashboard data and provides a portal for feedback and discussions on Resilient CSUSB. Includes training modules and access to other resources.	San Bernardino / Palm Desert	1-2 Years
		2-1-8. Construction project signage to display sustainable aspects of the project.	San Bernardino / Palm Desert	Less than 1 year
Wate	r Efficiency Related Focu		1	
2-2	Sub Metering	2-2-1. All new buildings to be sub-metered to the building level at a minimum. Building sub-meters to be network capable to report live data.	San Bernardino / Palm Desert	1 year
2-2		2-2-2. Survey campus buildings and equipment (i.e. sciences, cage washer, etc.) to determine to what extent does the campus have meters.	San Bernardino / Palm Desert	1-2 Years

# Roadmap

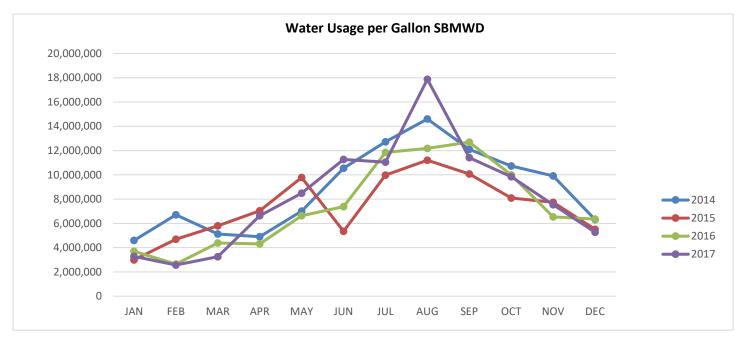
Strat	egy	Action	Campus	Duration
	~~~~		campus	Durution
2-2	Sub Metering	Water Efficiency Related Focus 2-2-3. Create an implementation plan that identifies what type of meter to use, at what level do we sub- meter (i.e. building, floor, space etc.), and a phased approach for installation.	San Bernardino / Palm Desert	2-3 years
		2-2-4. Install sub-meters per the implementation plan referenced in action 2-2-3.	San Bernardino / Palm Desert	5 years
Innov	ation Related Focus			
		2-3-1. Investigate the feasibility and possible applications for the use of living machines.	San Bernardino / Palm Desert	
2-3		<ul><li>2-3-2. Investigate the feasibility of using alternate water sources (i.e. recycled / reclaimed water) and treatment techniques for mechanical systems.</li><li>Possible best practice examples include SJSU and CSU Long Beach.</li></ul>	San Bernardino / Palm Desert	5 years
2-5	Plan to Net Positive	2-3-3. Assess the current storm drain / sewer systems and the sources of water that goes into these systems.	San Bernardino / Palm Desert	
		2-3-4. Investigate the feasibility and uses of reclaimed / recycle waitron the campuses. Determine if existing infrastructure is in place by current water purveyors in order to deliver alternate water sources onto the campuses.	San Bernardino / Palm Desert	5 years
		2-4-1. Consult and coordinate efforts with University's Emergency Manager, County Flood Control, Current water purveyors. Investigate possible solutions for on-site water storage and access.	San Bernardino / Palm Desert	1 year
2-4	Resiliency/ Disaster Plan	2-4-2. Investigate feasibility of water filtering technologies for on-site water treatment and identify possible solutions.	San Bernardino / Palm Desert	2-3 years
		2-4-3. Identify water storage components throughout campus (i.e. boilers, water heaters, pools, etc.) and determine if these devices are adequate for potable water use and to what level will the water need to be treated. Identify locations and capacities of these components.	San Bernardino / Palm Desert	2-3 years



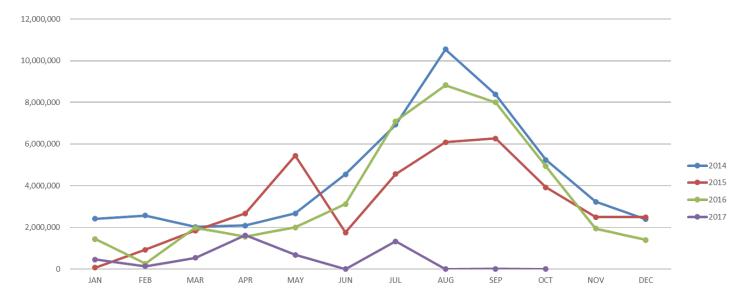
Ctrat	0.5%	Action	Campus	Duration
Strat		Action	Campus	Duration
Innov	ation Related Focus			
		<ul> <li>2-4-4. Identify and water availability and infrastructure required to carry it across campuses.</li> <li>Identify and locate shut-off valve locations and develop a sequence of operations to isolate necessary components.</li> </ul>	San Bernardino / Palm Desert	
	Resiliency/ Disaster	2-4-5. Determine feasibility of using existing campus irrigation well and pool as a source of water in time of emergency. Determine quality of this water and identify required treatment procedures as necessary to allow these sources to be potable.	San Bernardino / Palm Desert	
2-4	Plan	2-4-6. Establish MOUs for use of existing for-sale water across the campus to be used in the event of an emergency.	San Bernardino / Palm Desert	
		2-4-7. Create and maintain inventory of water coolers throughout the campuses for use in emergency.	San Bernardino / Palm Desert	
		2-4-8. Work with community partners to identify alternate sources of water to the campus (i.e. Devils Canyon) and establish procedures for distribution to campus and communities.	San Bernardino / Palm Desert	
		2-5-1. Gray water infrastructure and use on Phase 2 Housing project. Explore existing best practices within CSU.	San Bernardino / Palm Desert	
		2-5-2. Use reclaimed / recycled water for irrigation, groundwater recharge or use in heating / cooling systems.	San Bernardino / Palm Desert	5 years
2-5	Pilot Projects	2-5-3. Compare water usage in old Commons and new Commons buildings.	San Bernardino / Palm Desert	1-2 years
		2-5-4. Create and implement a water budget program in housing so that users can be educated, track their usage and budget accordingly.	San Bernardino / Palm Desert	5 years
		2-5-5. Create procurement guidelines for equipment that uses water	San Bernardino / Palm Desert	



### Water Usage on Campus



Water Usage per Gallon Irrigation Well



# Roadmap Food and Waste

### Goal 3: Net Zero Waste Campus

Both the San Bernardino and Palm Desert campuses will divert all materials from entering the landfill and reuse them as a beneficial resource through reuse, composting, recycling or other means.

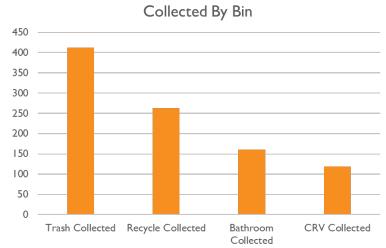
Strat	egy	Action	Campus	Duration
		Event and Outreach Related Focus		
3-1	Student and community engagement	<ul> <li>3-1-1. Develop and implement campaign to educate and instruct campus community what type of waste goes into which stream.</li> <li>3-1-2. Educate incoming students at Coyote First Steps (CFS) / SOAR events. This will be achieved using a combination of seminar / workshop format and short videos to be accessed at any time.</li> <li>3-1-3. Promote use of reusable items such as cups,</li> </ul>	San Bernardino / Palm Desert San Bernardino / Palm Desert San	
		straws, etc. in lieu of single use, disposable items.	Bernardino / Palm Desert	
3-2	Net Zero Waste event guidelines	3-2-1. Develop and implement event guidelines that promote a zero waste event. Include recyclable / compostable items for single use, donate unused food, etc. Event volunteers / staff to help redirect items into the appropriate stream.	San Bernardino / Palm Desert	
		Programmatic Related Focus		
3-3	Create and Adopt and Sustainable Procurement Policy	<ul> <li>3-3-1. Review intern report on findings associated to a sustainable procurement policy and identify best practices.</li> <li>3-3-2. Analysis of the items the campuses purchase Perform a life cycle analysis of those items.</li> <li>3-3-3. Using existing office supply contracts, substitute commonly purchased items with sustainable products.</li> <li>3-3-4. Draft an implement a campus policy that promotes sustainable purchases and disposal of</li> </ul>	San Bernardino / Palm Desert San Bernardino / Palm Desert San Bernardino / Palm Desert San Bernardino /	
3-4	Ongoing auditing and accountability related to waste stream diversion	<ul> <li>items required for campus operations.</li> <li>3-4-1. Conduct pilot waste audit for one campus building. Review findings and document the process to develop best practices and lessons learned.</li> <li>3-4-2. Conduct frequent building waste audits to ensure proper waste stream diversion and required education.</li> <li>3-4-3. Audit waste service processes by service providers to ensure sustainable waste practices.</li> </ul>	Palm Desert San Bernardino / Palm Desert San Bernardino / Palm Desert San Bernardino / Palm Desert	

# Roadmap Food and Waste

Strat	egy	Action	Campus	Duration
		Programmatic Related Focus	1	
	Utilize and improve	3-5-1. Provide additional hydration stations to reduce the need for single use purchased plastic bottles.	San Bernardino / Palm Desert	
3-5	on existing campus related waste diversion strategies	3-5-2. Investigate and implement usage of disposal bins that promote increased recycling and composting actions on an individual basis.	San Bernardino / Palm Desert	
		3-5-3. Sell off / donation of surplus and unwanted equipment and furniture.	San Bernardino / Palm Desert	
	New recycle / reduce	<ul> <li>3-6-1. Develop infrastructure and facilities to promote landfill diversion such as an onsite recycle / compost center.</li> <li>3-6-2. Collaborate with service providers to ensure</li> </ul>	San Bernardino / Palm Desert San	
3-6	/ reuse programs including composting	single use items are recyclable / compostable.	Bernardino / Palm Desert	
		3-6-3. Starbucks cup only disposal bins.	San Bernardino / Palm Desert	

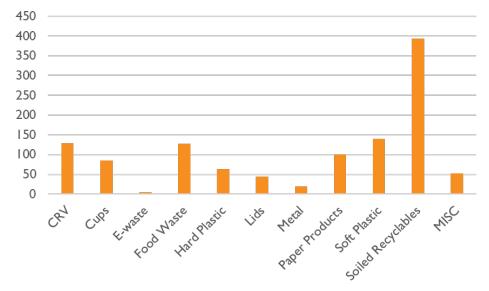
# Snapshot Food and Waste

Over a one week period in February, the Office of Sustainability collected 970 pounds of non-hazardous waste from University Hall.





Waste Found



# Roadmap Food and Waste

### Goal 4: Access to Healthy and Sustainable Food

In direct support of the CSU basic needs initiative and the Real Food Challenge, both the San Bernardino and Palm Desert campuses will provide food security to its students. Additionally the University will provide healthy food from sustainable sources.

Strat	egy	Action	Campus	Duration
		Event and Outreach Related Focus		
	ca he tc 4- St a	4-1-1. Develop an education program to allow the campus and surrounding community identify what healthy and sustainable food choices mean and how to make them.	San Bernardino / Palm Desert	
		4-1-2. Educate incoming students at Coyote First Steps (CFS) / SOAR events. This will be achieved using a combination of seminar / workshop format and short videos to be accessed at any time.	San Bernardino / Palm Desert	
4-1	Student and community	4-1-3. Create an ongoing and evolving campaign that promotes healthy and sustainable choices.	San Bernardino / Palm Desert	
4-1	engagement	4-1-4. Promote University course offerings related to nutrition. Incorporate more nutrition / health coursework into G.E. requirements.	San Bernardino / Palm Desert	
		4-1-5. Provide more extended education courses focusing on nutrition and healthy / sustainable lifestyle choices.	San Bernardino / Palm Desert	
		4-1-6. Develop and implement event guidelines that reflect a healthy / sustainable practice. Events with food should be locally sourced, left=overs available for at-need students and members of surrounding community, etc	San Bernardino / Palm Desert	
		Programmatic Related Focus	-	-
	Food recovery program	4-2-1. Review and evaluate other best practices used within the CSU system and other higher education institutions especially within the region.	San Bernardino / Palm Desert	
4-2		4-2-2. Develop and promote food availability mobile app that notifies at need campus and community members when left-over and/or soon to expire food is available.	San Bernardino / Palm Desert	
		4-2-3. Collaborate with the University's third party food service providers to ensure flood safety and liability aspects are cleared.	San Bernardino / Palm Desert	

# Roadmap Food and Waste

Strat	egy	Action	Campus	Duration
		Programmatic Related Focus		
4-3	Ongoing auditing and accountability	<ul> <li>4-3-1. Develop an auditing plan that allows for verification of the source of food being provided to the University. Elements include frequency of inspections, standards of what inspections are requiring, etc</li> <li>4-3-2. Develop and implement annual student survey</li> </ul>	San Bernardino / Palm Desert San	
		to evaluate knowledge and attitudes related to sustainable and healthy food.	Bernardino / Palm Desert	
		4-4-1. Expand hot meal vouchers for food insecure members of the campus community.	San Bernardino / Palm Desert	
4-4	Utilize and improve on existing campus related food access strategies	4-4-2. Create incentives or partial subsidy food students selecting healthier food option from campus dining options.	San Bernardino / Palm Desert	
		4-4-3. Campus community garden food donations to Den food pantry.	San Bernardino / Palm Desert	
		4-4-4. Expand service and options available at Obershaw Den.	San Bernardino / Palm Desert	

# Roadmap Transportation and Mobility

Goal 5:Increase Average Vehicle Ridership (AVR) to 1.25 (1.5 AVR is the stretch goal)For the San Bernardino and Palm Desert campuses, there will be fewer people driving individually in a<br/>car to arrive to the campus.

Strategy		Action	Campus	Duration		
Reduction Related Focus						
5-1	Fare and ridership incentives - Individual	5-1-1. Coyote ID Free Ride: SunLine (PDC) fare box integration to allow students/faculty/staff to ride buses for free by swiping their Coyote IDs. Starting point, we've had initial meeting w/ SunLine and they are interested.	Palm Desert	2-3 years		
		5-1-2. SolVan program: Promote SolVan for employees & students at PDC.	Palm Desert	2-3 years		
		5-1-3. Analyze fare box data and evaluate promotions.	San Bernardino / Palm Desert	1 year		
		5-1-4. Conduct and analyze ridership feedback surveys.	San Bernardino / Palm Desert	1 year		
		5-1-5. Create monthly prize drawings / giveaways to increase ridership.	San Bernardino / Palm Desert	1 year		
5-2	Fare and ridership incentives - group or collective	5-2-1. Launch of Enterprise Vanpool. The contract with Enterprise is in place.	San Bernardino / Palm Desert	1 year		
		5-2-2. Require students to provide a local address to better provide rideshare opportunities.	San Bernardino / Palm Desert	2-3 years		
		5-2-3. Launch of updated ridelinks carpool matching platform.	San Bernardino / Palm Desert	2-3 years		
		5-2-4. Integrate with SunLine's carpool matching portal.	Palm Desert	2-3 years		
		5-2-5. Outreach and advertise the Coyote Cruiser service.	San Bernardino / Palm Desert	2-3 years		
		Infrastructure Related Focus				
5-3	Traffic calming on campus and city streets.	5-3-1. Add a 4-way stop at Northpark and Ash.	San Bernardino	1 year		
		5-3-2. Add a 4-way stop at A/B connector road and Ash.	San Bernardino	1 year		
		5-3-3. Traffic calming on North Campus Circle including adding additional stops, striping and other traffic control measures to slow traffic speed and increase safety.	San Bernardino	1 year		

# **Roadmap** Transportation and Mobility

Strat	egy	Action	Campus	Duration
		Infrastructure Related Focus		
5-3	Traffic calming on campus and city streets.	5-3-4. Traffic calming on Berger Circle Drive to decrease traffic speeds and increase safety.	Palm Desert	1 year
		5-3-5. Install crosswalk at Parking Lot A and B and Berger Circle Drive.	San Bernardino	1 year
		5-4-1 Bus stop and shelter enhancements at PDC.	Palm Desert	2-3 years
5-4	Bus Access	5-4-2. Implement findings from ridership surveys.	San Bernardino / Palm Desert	
	Pedestrian Safety	5-5-1. Address Cook St jaywalking.	Palm Desert	1 year
5-5		5-5-2. Address Northpark Blvd jaywalking.	San Bernardino	1 year
		5-5-3. Support for City of San Bernardino active transportation plan.	San Bernardino	2-3 years
		5-5-4. Engage in Redlands passenger rail project points of interest study.	San Bernardino	2-3 years
		5-5-5. Awareness and enforcement of "Policy on Vehicles on Campus Pathways" and "Policy on Wheeled Devices".	San Bernardino / Palm Desert	1 year
		5-5-6. Pedestrian improvements on campus, such as adding a sidewalk on Northpark and improving sidewalk gaps.	San Bernardino / Palm Desert	2-3 years
5-6	Bike Access	5-6-1 Bike rack standardization and expansion.	San Bernardino / Palm Desert	1 year
		5-6-2. Secure bike parking areas with access control utilizing Coyote Once card.	San Bernardino / Palm Desert	2-3 years
		5-6-3. Designate bike routes and implement route signage program.	San Bernardino / Palm Desert	1 year
		5-6-4, Identify bicycle pathway gaps on and off campus and work with stakeholders / partners to close those gaps.	San Bernardino / Palm Desert	2-3 years
		5-6-5. Provide additional bike repair stations, staffed bike repair kiosks and bike repair clinics.	San Bernardino / Palm Desert	2-3 years

# Roadmap Transportation and Mobility

Strategy		Action	Campus	Duration		
Encouragement Related Focus						
5-7	Incentives	5-7-1. Evaluate effectiveness of cash incentives.	San Bernardino / Palm Desert	1 year		
		5-7-2. Incentive drawing for bus riders.	San Bernardino / Palm Desert	1 year		
5-8	Services	5-8-1. Launch a carpool matching solution for the Palm Desert Campus.	San Bernardino / Palm Desert	2-3 years		
5-9	Frograms5-9-2. Evaluate Zipcar after5-9-3. Coordinate with HR of telecommuting.5-9-4. Obtain League of Ame Friendly University designat5-9-5. Change department r Transportation Services" to Transportation" to reflect p	5-9-1. Evaluate valet for carpoolers.	San Bernardino / Palm Desert	1 year		
		5-9-2. Evaluate Zipcar after housing & dining opens	San Bernardino / Palm Desert	1 year		
		5-9-3. Coordinate with HR on possibilities to offer telecommuting.	San Bernardino / Palm Desert	4-5 years		
		5-9-4. Obtain League of American Bicyclists Bike Friendly University designation.	San Bernardino / Palm Desert	4-5 years		
		5-9-5. Change department name from "Parking & Transportation Services" to "Department of Transportation" to reflect parking as only one component and not the primary.	San Bernardino / Palm Desert	4-5 years		

# Roadmap Education and Community

**Goal 6:** Developing Sustainability Awareness through Education & Outreach

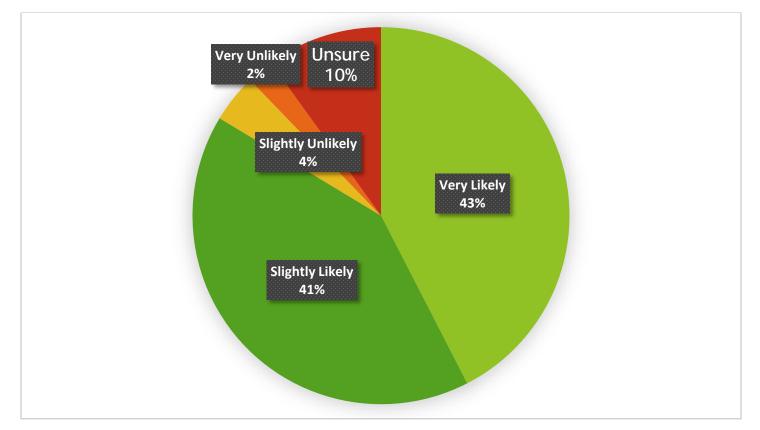
This Roadmap is in development Completion by October, 2018

# Snapshot Education and Community

### Geography 390- Environmental Sustainability in the 21st Century

- Assignment was to gather student feedback, and give recommendations
- Survey with 10 student made questions, in addition to Resilient CSUSB Launch survey.
- Survey sent out to all students through ASI
- Received 485 responses
- Q: Rank what our campus should focus on... (Highest to lowest)
- A: 1. Saving Energy
  - 2. Reducing Waste
  - 3. Water Saving
  - 4. Food and Health
  - 5. Wildlife Habitats
  - 6. Education/Community Building
  - 7. Transportation
  - 8. Green Buildings/ Spaces

### Q: How likely are you to adjust your current lifestyle to support sustainable initiatives...



# Roadmap Buildings and Land Use

Goal 7: Support

# This Roadmap is in development Completion by October, 2018