

University of California – Solid Waste & Recycling Working Group
Fiscal Year 2014 – 2015 (Summary Report)

Zero Waste by 2020 is the goal that each campus is working towards through implementing the hierarchy of reduce, reuse recycle.

Due to reorganization of Sustainability into the Chief Operating Officer division, Charlotte Strem stepped down as Chair of the Solid Waste Working Group, and the group is now co-chaired by Matthew O'Carroll (SB) and Adam Schnirel (SF), and Anne Krieghoff (I) has volunteered to analyze and report the solid waste and recycling data. Subgroups have been established for: Lab Recycling; Procurement; Waste Diversion Plans; Zero Waste Events/ Green Events. In-person working group meetings were held, at UCLA, and at the California Higher Education Sustainability Conference. With the help of Valerie Vergara from Procurement Services, the UC campuses were also able to receive funds from BioRad, a life science equipment vendor. Many campuses utilized these funds to improve waste management efforts in laboratories.

Qualitative Progress

For the second year in a row, UCI was named #1 "Coolest School" by Sierra Magazine. A major factor attributing to this ranking, was the campus' 83% diversion rate.

UC Santa Barbara received the Energy & Efficiency Sustainability Best Management Practice Award for Innovative Waste Reduction from the California Higher Education Sustainability Conference for their work titled, "Optimizing Waste Management Services through Stakeholder Engagement." The project took place over a period of three months on Fridays at 4am, and resulted in 350 unnecessary landfill receptacles removed and most importantly improved stakeholder engagement from the custodial staff.

UC Davis won the Honorable Mention Energy & Efficiency Sustainability Best Management Practice Award for Innovative Waste Reduction for their Gravel Washing Facility, which will wash and clean soiled gravel from outdoor animal facilities so that it can be reused in other applications.

UC Berkeley are turning into a dynasty in the RecycleMania Game Day Challenge: Basketball, as they won for the third year with a 95.7% diversion rate. Their efforts also saw them achieve victory in the first Annual 2015 Pac-12 and Green Sports Alliance "Road to Zero Waste Challenge". For the Game Day Challenge: Football, UC Davis won in two categories (overall diversion and waste minimization), with a 93.4% diversion rate and only 0.01 lbs. per person of trash generated. In the Grand Champion Category (highest grossing tonnage of recyclables) of RecycleMania, UC Irvine ranked 7th.

UC Merced installed an impressive waste sorting facility on-campus, which will look to save over \$20,000/year compared to the previous system that was in place. UC Riverside expanded their newly constructed transfer station, and are now able to campus metrics at the three-yard bin level for all waste streams.

UC Los Angeles introduced multi-stream bins in Pauley Pavilion, enabling the collection of compostable and recyclables. UC Santa Cruz introduced the campuses first pilot Zero Waste collection model that composed of 48 stations with a four-stream collection system. The Lawrence Berkeley Lab expanded their waste diversion program, "Rethink Waste", to more than 40 buildings. UC San Francisco collaborated with the San Francisco Department of the Environment on a garbage study, which is achieving a 74 ton/ month garbage reduction for the campus.

Medical Centers are making progress towards waste diversion goals, though they have different waste streams and issues than general campuses. UCLA Health completed their isolation gown replacement project, which helped to divert 90 tons of waste this past year. UCSF Med Center provided recycling and compost bins, as well as clip-on/ saddle trash bins for the UCSF Parnassus hospital

Quantitative Progress

Campus	Diversion Percentage (w/o C&D)	Diversion Percentage (w/ C&D)	Waste Generation/ Capita/ Year (lbs./ WCU/ year)
UCB	47%	54%	200
UCD	74%	79%	340
UCD Med	30%	32%	-
UCI	81%	82%	100
UCLA	63%	61%	220
UCLA Med	41%	41%	-
UCM	46%	51%	120
UCR	58%	72%	140
UCSB	70%	73%	160
UCSC	66%	65%	160
UCSD	45%	62%	300
UCSF	69%	69%	320
UCSF Med	35%	38%	-

Diversion data is presented *with* and *without* construction and demolition (C&D) waste, as C&D waste is not generated from a campus' typical operations and fluctuates significantly based on construction activities, thus skewing waste generation data. UC Irvine remains the top recycling campus with a waste diversion rate (not including C&D) of 81%. They achieved the 75% diversion of municipal solid waste (MSW) from landfills by FY12/13 last year and remain above the goal. The following campuses in the top tier (not including C&D) are UC Davis (74%), UC Santa Barbara (70%), and UC San Francisco (not including UCSF Med Center), also at 70%. The statewide goal is to meet 75% diversion of (MSW) by 2020. One must keep in mind that some schools face tougher situations when it comes to waste diversion, as what you can do with your material is limited by recycling and compost facilities available in the vicinity. Waste generation per capita quantifies waste reduction efforts, which is of the utmost importance, as the recycling hierarchy is reduce, reuse, and recycle. UC Irvine, UC Merced, UC Riverside, and UC Santa Barbara, lead the system with the lowest waste generation per weighted campus user.

Issues & Barriers

The Zero Waste 2020 goal is rapidly approaching. While some campuses are ahead of others, together we struggle with the disposal of various commodities, uniform signage and message, and financial constraints relating to the improvement of programs and practices.

Looking Ahead FY15/16

To assist in sharing information throughout the system, leverage consistent and better pricing, as well as improve uniformity and efficacy in UC waste management programs, a UC Solid Waste & Recycling Best Management Practices Guide will be created. The Refuse & Recycling Research Center at UC Santa Barbara will work on creating the guide with the help of the other campuses, and with funding support from the California Student Sustainability Coalition.

APPENDIX

Active Working Group Members (2014/15)

UCOP: Charlotte Strem

LBL: Erin Claybaugh

UCB: Lin King

UCLA: Jesse Escobar; Nurit Katz

UC Med: Teresa Hildebrand

UCM: Matt Hirota

UCR: John Cook; Delphine Faugeroux

UCD: Michelle La; Sue Vang

UCD Health: John Danby

UCI: Anne Krieghoff

UCSD: Krista Mays; Sarah McKinstry

UCSF: Susan Bluestone Adam Schnirel

UCSB: Matthew O’Carroll; Sarah Siedschlag

UCSC: Brad Angell; Elida Erickson

Waste & Recycling Data

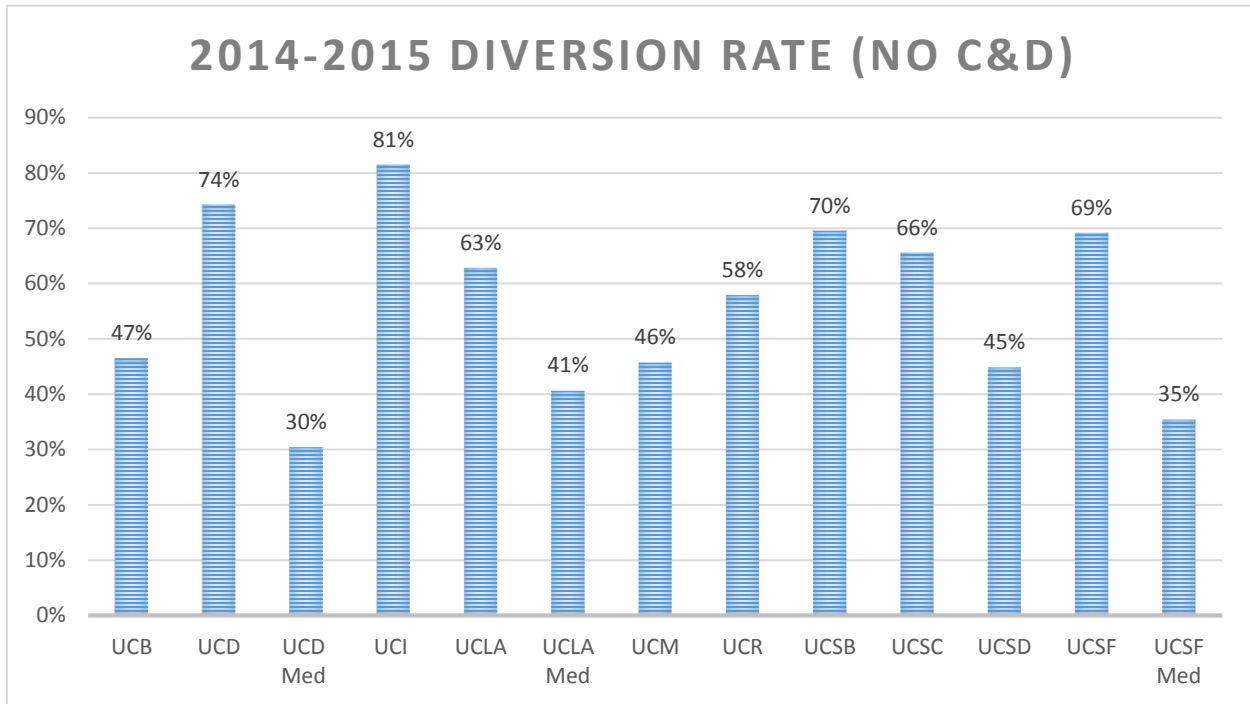


Figure 1: Waste Diversion rate without construction and demolition waste

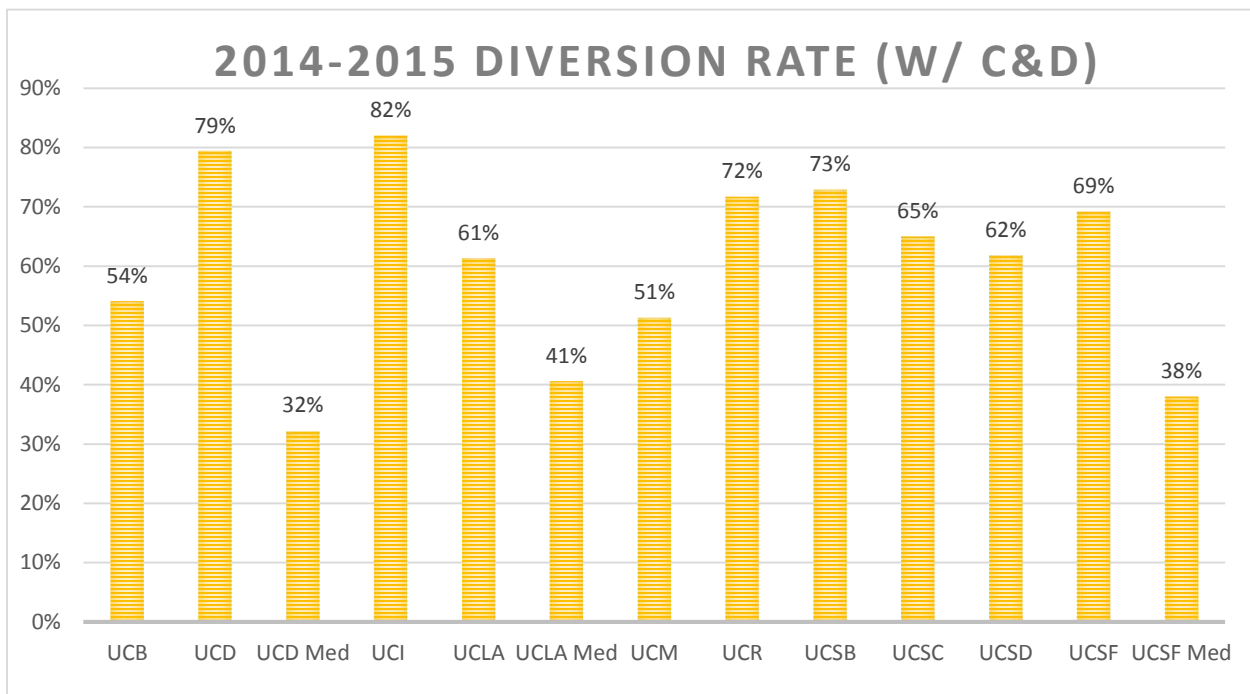


Figure 3: Waste diversion rate including construction and demolition waste

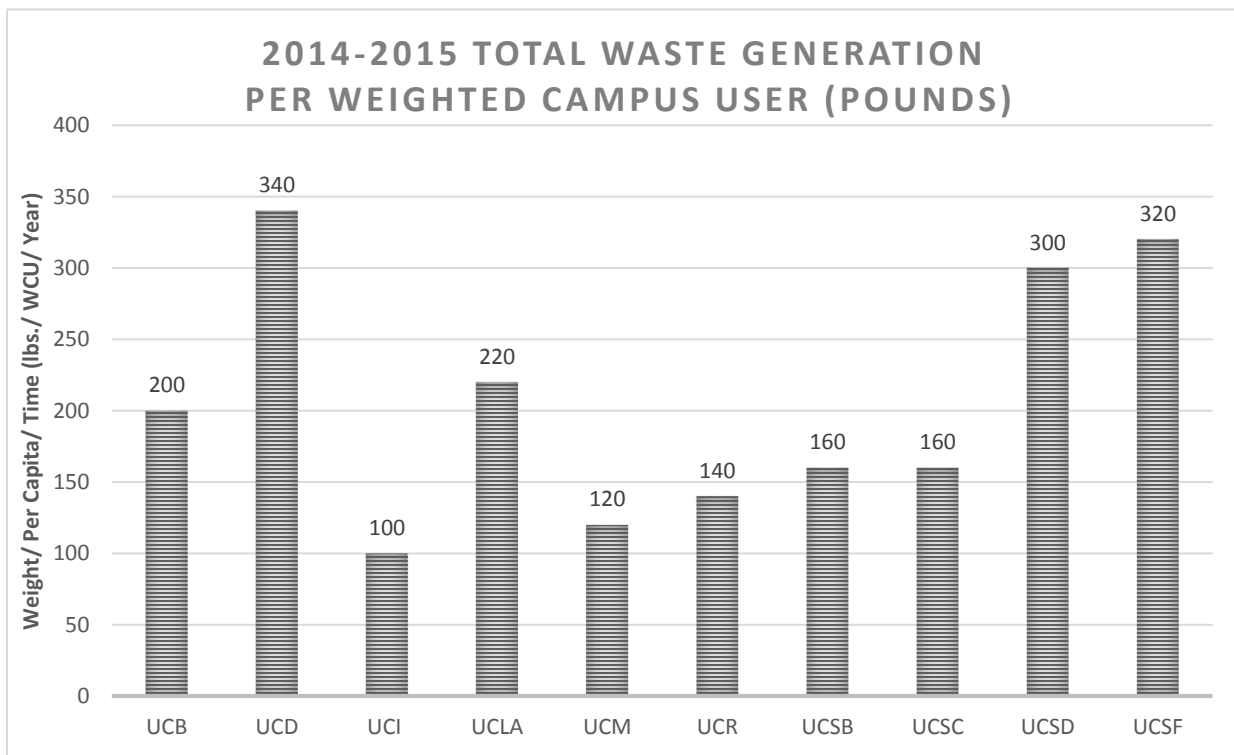


Figure 2: Total waste generation per weighted campus user¹

¹ Weighted Campus User is a measurement of an institution's population that is adjusted to accommodate how intensively certain community members use the campus. This figure is used to normalize resource consumption and environmental impact in order to accommodate the varied impacts of different population groups.