

## UC Sustainability Survey: Fall 2021

### Overview

The purpose of this survey was to generate Fall 2021 insights regarding the knowledge, beliefs, opinions, and behaviors of UC students, faculty, and staff regarding sustainability and environmental issues. The sections of this report are organized by the topics of the survey items. **The first section (Beliefs and opinions)** details the general beliefs and opinions of the UC population when it comes to environmental issues. This section also makes comparisons to the current levels of beliefs and opinions in the broader Cincinnati metro area, Hamilton County, the state of Ohio, and the nation overall. **The second section (Behavior)** describes the self-reported sustainability behaviors of the UC population. **The third section (Desire for UC Action)** reports how the UC population feels about UC's current sustainability efforts and what they think are the most important sustainability initiatives that UC could implement. **The fourth section (Knowledge)** reports the knowledge levels of the UC population (overall, and within students, staff, and faculty separately) regarding sustainability topics. This is assessed by recording the % of correct responses to factual knowledge items about sustainable development, the world population, rates of food waste, and greenhouse gasses.

### Executive Summary

- Most students, faculty, and staff (79% of the full sample) are worried about global warming.
- A vast majority (82%) say sustainability is either “*extremely*” or “*very*” important.
- These levels of beliefs in climate science and worry about global warming are higher than population levels in surrounding geographic areas (county, metro area, state, and national).
- Despite the strong positive views of sustainability goals, only 23% of students, staff, and faculty think that UC's sustainability efforts are better than “adequate.” These infrequent positive ratings are likely because one of the most common responses was “I'm not aware of UC's sustainability efforts.”
- Respondents rated the importance of several sustainability initiatives. Highest importance was given to reducing plastic bags, reducing plastic bottles, and increasing green infrastructure.
- Among students, staff, and faculty, recycling “every time” is far more common when at home than when on campus.
- 26% of students recycle “every time” on campus, compared to 35% of staff and 43% of faculty.
- Among commuters, only 6% say they carpool with others when they commute.

## Survey Methods

The content of the survey was designed by the Office of Sustainability, through the collaboration of Daniel Hart, Andrew Porter, Joseph Harrell, and Dr. Abel Gustafson (Asst. Professor, Communication). Dr. Gustafson managed the data collection, conducted the analyses, designed the figures, and produced this report document. Amanda Pace (M.A. student, Communication) programmed the survey in the Qualtrics online survey program. Questions about this study and its findings can be directed to Daniel Hart of the UC Office of Sustainability at [daniel.hart@uc.edu](mailto:daniel.hart@uc.edu).

The sample for this study was obtained by distributing a link to the survey via email to all UC students, faculty, and staff on October 13, 2021. To avoid a self-selection bias favoring participants who were highly interested in giving their opinion on sustainability topics, this recruitment email did not mention the topic of sustainability. Instead, the email informed participants that the survey was about important issues related to UC's guiding mission of "Next Lives Here." The email provided a link to the online survey, which respondents completed in the online platform Qualtrics.

A total of  $N = 2,162$  respondents opened the survey, and a total of  $N = 1,586$  finished the survey (a 73% completion rate). Of those who finished the survey, 4 cases were removed from the data because they chose to not answer most of the questions, leaving  $N = 1,582$  for analysis. This final sample for analysis included 933 students (60%), 425 staff (27%), and 224 faculty (14%). In this report, we present findings regarding the total sample and the respective subsample groups of students, faculty, and staff.

For the proportion statistics given in this report, the average margin of error (MoE) at the 95% confidence interval for the total combined sample is  $\pm 2$  percentage points. For proportion statistics regarding the subsample of students, specifically, the MoE is  $\pm 3$  points, for staff the MoE is  $\pm 5$  points, and for faculty the MoE is  $\pm 7$  points. However, readers should note that opt-in samples such as this are non-representative in many ways, and the limitations of self-report data should be considered when interpreting these findings.

This sample included respondents from the Uptown West Campus ( $n = 1,121$ ; 71%), the Uptown East Campus ( $n = 300$ ; 19%), UC Clermont ( $n = 30$ ; 2%), UC Blue Ash ( $n = 64$ ; 4%), and respondents who designated "Other" ( $n = 67$ ; 4%). Because the small sizes of the UC Clermont, UC Blue Ash, and "Other" groups would result in a very large margin of error around any location-specific statistics, we opt to combine all locations when reporting the findings of this study.

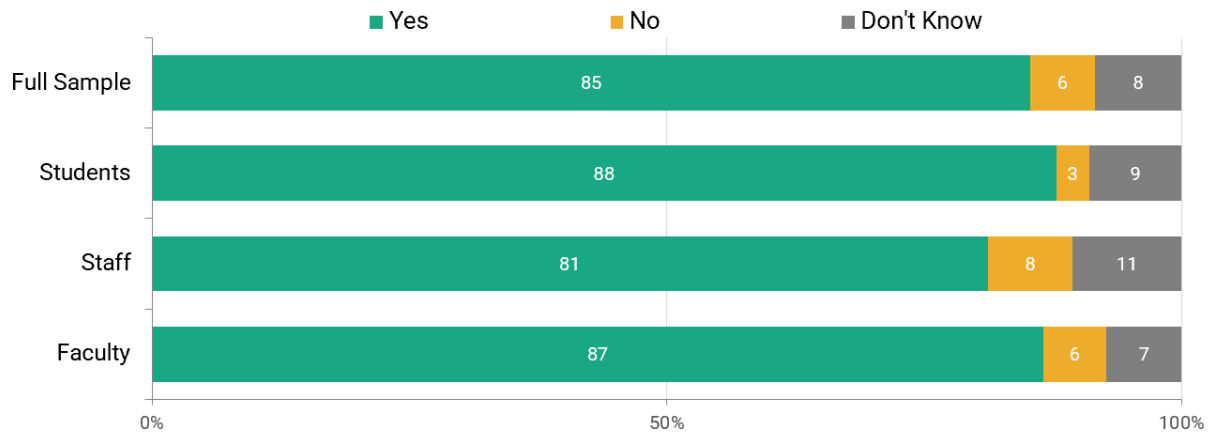
Within the full sample, 17% ( $n = 271$ ) of the respondents live on campus, 74% ( $n = 1,176$ ) of the respondents live off campus but regularly come to campus for classes or work, and 8% ( $n = 126$ ) of the respondents live off campus and do all of their classes or work remotely.

The findings of this survey should also be interpreted in light of the ongoing COVID-19 pandemic, which—during the survey and for more than a year prior—has significantly affected the educational and working experiences and behaviors of UC students, faculty, and staff. For example, it is likely that these situational factors may have increased commuting behavior and decreased awareness of on-campus happenings such as sustainability initiatives.

## Beliefs and Opinions

The survey finds that 85% of respondents agree global warming is happening. For comparison, this surpasses current estimates in Hamilton county (75%), the Cincinnati metro area (68%), the state of Ohio (64%), and the nation (72%). These comparisons are drawn from research by the Yale Program on Climate Change Communication's [Climate Change in the American Mind](#) project, which has produced [maps that show public opinion](#) at the national, state, and even county level. Our UC survey used identical questions to enable these direct comparisons.

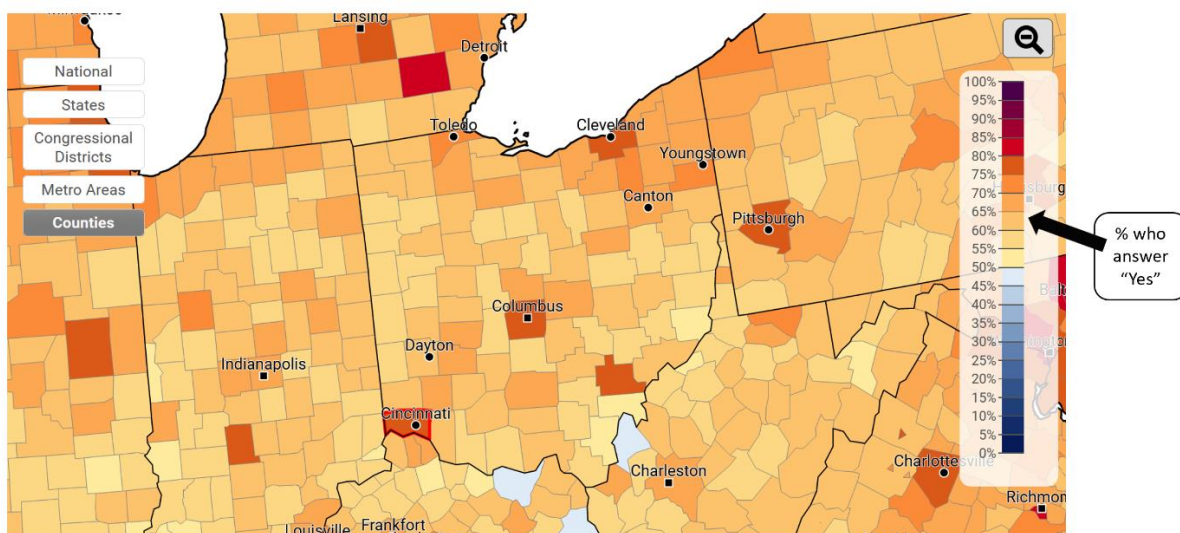
### Nearly All of the UC Community Agrees That Global Warming is Happening



October 2021  
Base: UC students, faculty, and staff (N = 1,582)

[after text definition of global warming]  
"What do you think: Do you think global warming is happening?"

### Estimated % in Each U.S. County Who Say Global Warming is Happening

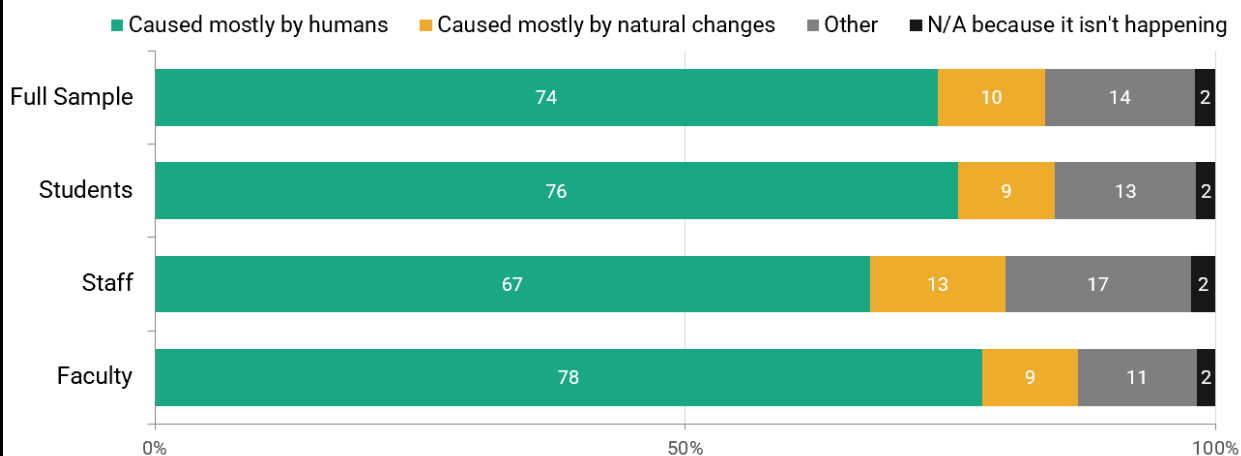


Source: Yale Climate Opinion Maps, 2020  
<https://climatecommunication.yale.edu/visualizations-data/ycom-us/>

[after text definition of global warming]  
"What do you think: Do you think global warming is happening?"

About three in four members of the UC community (74%) say global warming is caused by humans. More faculty (78%) and students (76%) hold this view, compared to staff (67%). Still, all groups are above the current levels found in residents of Hamilton county (61%), the Cincinnati metro area (55%), the state of Ohio (54%), and the nation (57%)—according to Yale’s public opinion research.

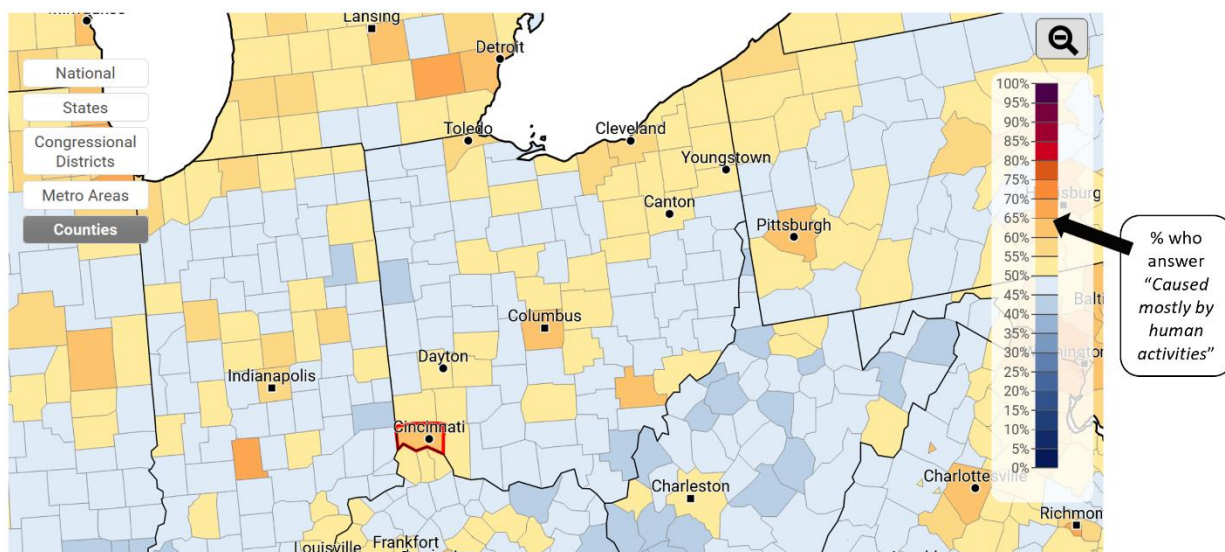
## Most of the UC Community Agrees That Global Warming is Mostly Caused by Humans



October 2021  
Base: UC students, faculty, and staff (N = 1,582)

"Assuming global warming is happening, do you think it is..."

## Estimated % in Each U.S. County Who Say Global Warming is Human-Caused

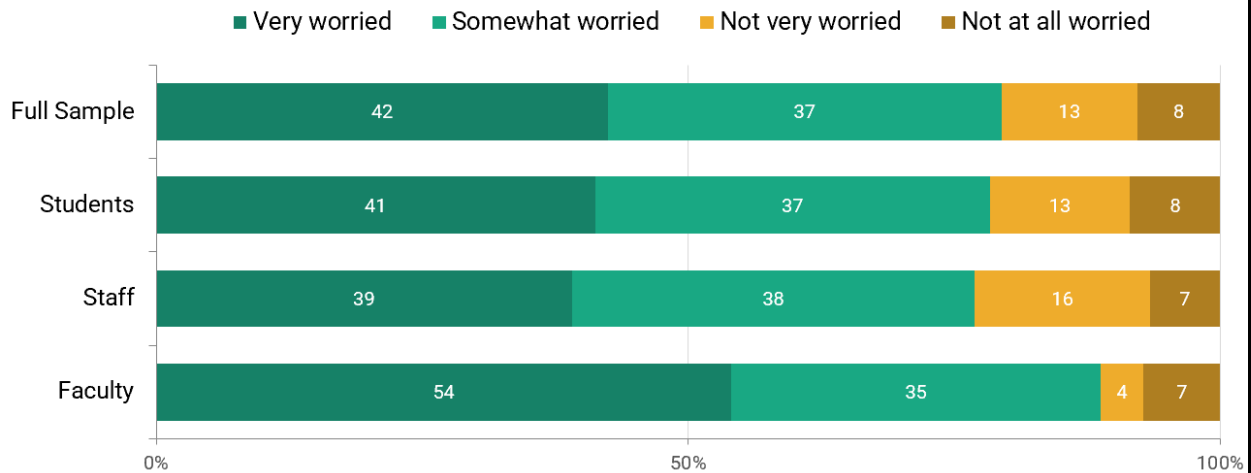


Source: Yale Climate Opinion Maps, 2020  
<https://climatecommunication.yale.edu/visualizations-data/ycom-us/>

"Assuming global warming is happening, do you think it is..."

Similarly, about eight in ten UC respondents (79%) said they are either “*somewhat*” or “*very*” worried about global warming. This includes nearly all (89%) of UC faculty. For comparison, worry about global warming is substantially more common in the UC community than in Hamilton county (63%), the Cincinnati metro area (57%), the state of Ohio (57%), and the nation overall (63%)—according to the Yale public opinion research that used the exact same questions as our UC survey.

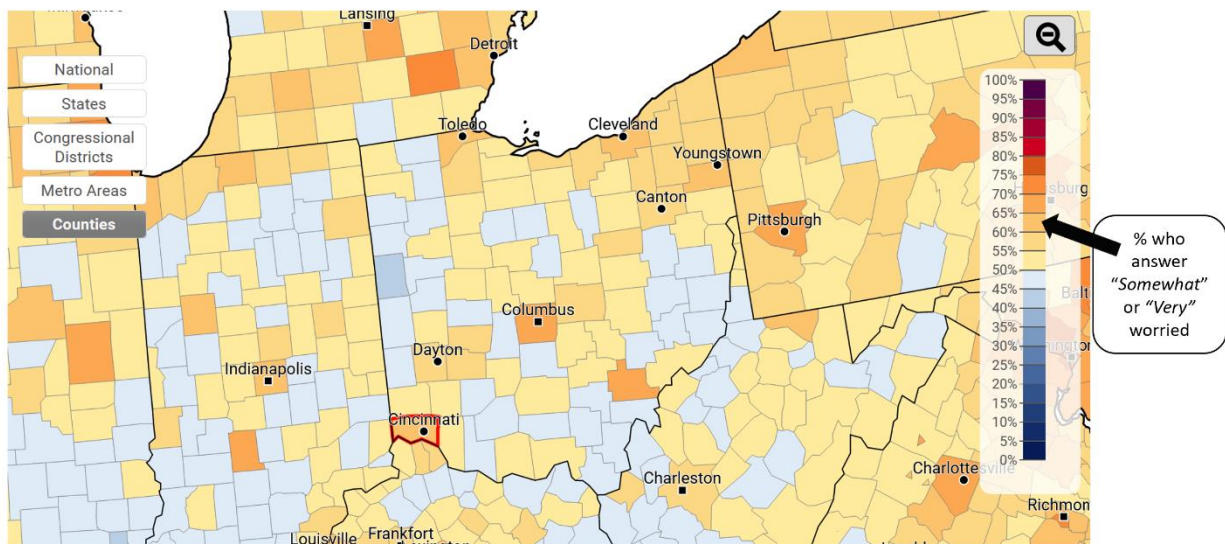
## A Majority of the UC Community Is Worried About Global Warming



October 2021  
Base: UC students, faculty, and staff (N = 1,582)

“How worried are you about global warming?”

## Estimated % in Each U.S. County Who Are Worried About Global Warming

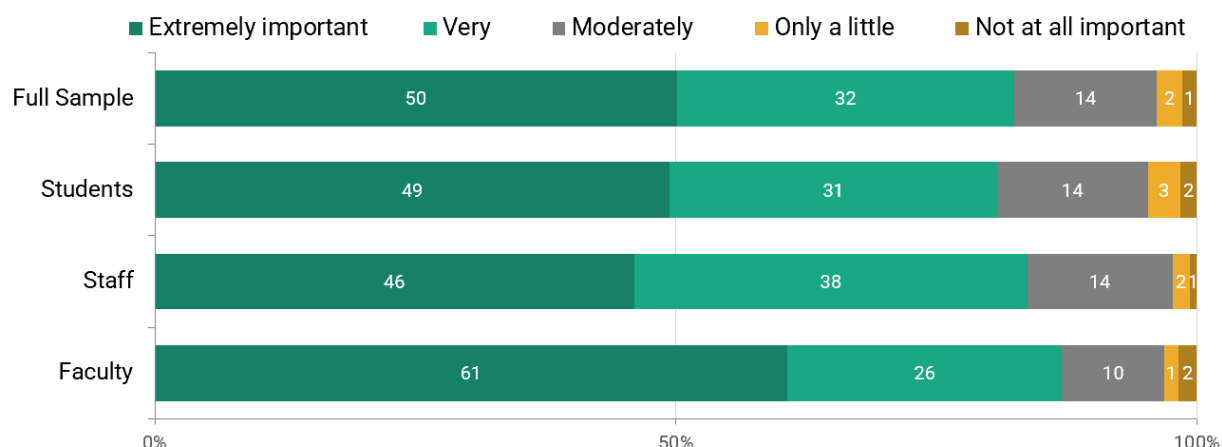


Source: Yale Climate Opinion Maps, 2020  
<https://climatecommunication.yale.edu/visualizations-data/ycom-us/>

“How worried are you about global warming?”

A vast majority (82%) of the UC community also says that environmental issues and sustainability are either “*extremely*” or “*very*” important. This opinion does not vary much between students, staff, and faculty. This is an extremely strong belief among all groups. Interestingly, the remaining portion is *not* comprised of strong opposition, as only 3% answered either “only a little” or “not at all” important.

### A Large Majority of the UC Community Say Sustainability Issues are “Extremely” or “Very” Important



October 2021  
Base: UC students, faculty, and staff (N = 1,582)

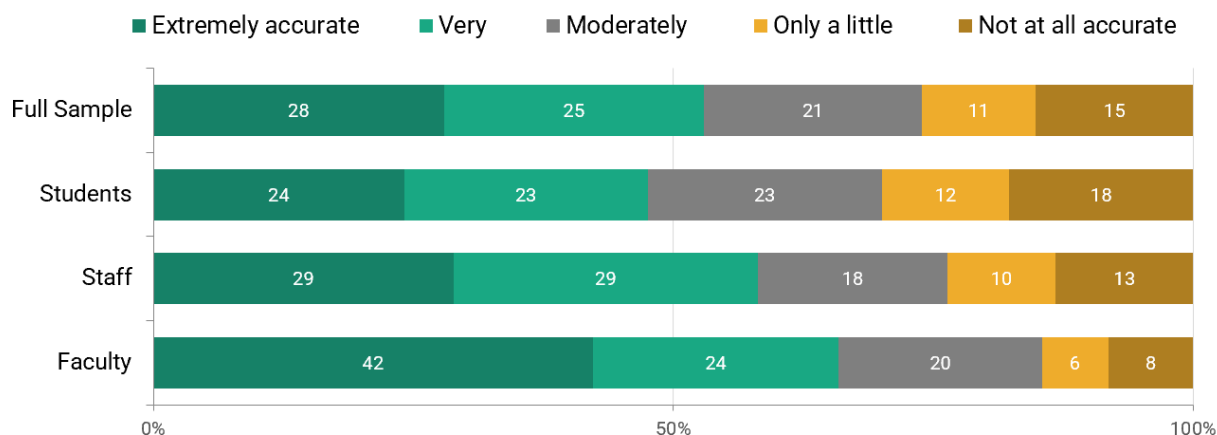
*“In your opinion, how important are environmental issues and sustainability?”*

When presented with a definition of environmental justice, about half of the UC respondents said this definition was either “extremely” or “very” accurate. Interestingly, students (47%) were least likely to say this was an “extremely” or “very” accurate statement, while faculty (64%) were most likely.

### About Half of the UC Community Says this Definition of Environmental Justice is “Extremely” or “Very” Accurate



*“Environmental justice refers to how people of color and minority groups are often disproportionately burdened by negative environmental externalities (side effects or unintended consequences).”*



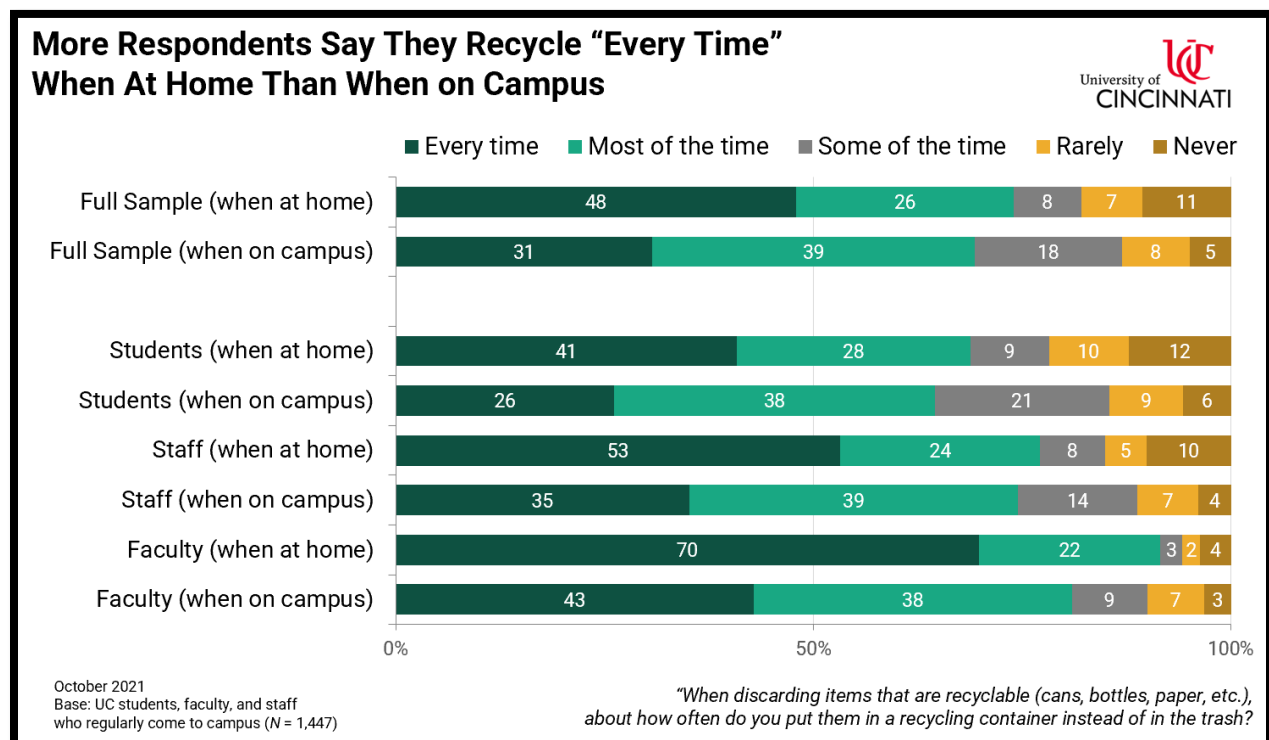
October 2021  
Base: UC students, faculty, and staff (N = 1,582)

*[after reading definition of environmental justice]  
“In your opinion, how accurate is this statement?”*

## Personal Behaviors

In this survey, respondents were asked to report how often they recycle when at home, and how often they recycle when on campus. To enable valid comparisons between at-home and on-campus recycling behavior, we compute the statistics among the respondents who answered (on a different question) that they do come to campus frequently ( $n = 1,447$  say they either live on, or commute to, campus).

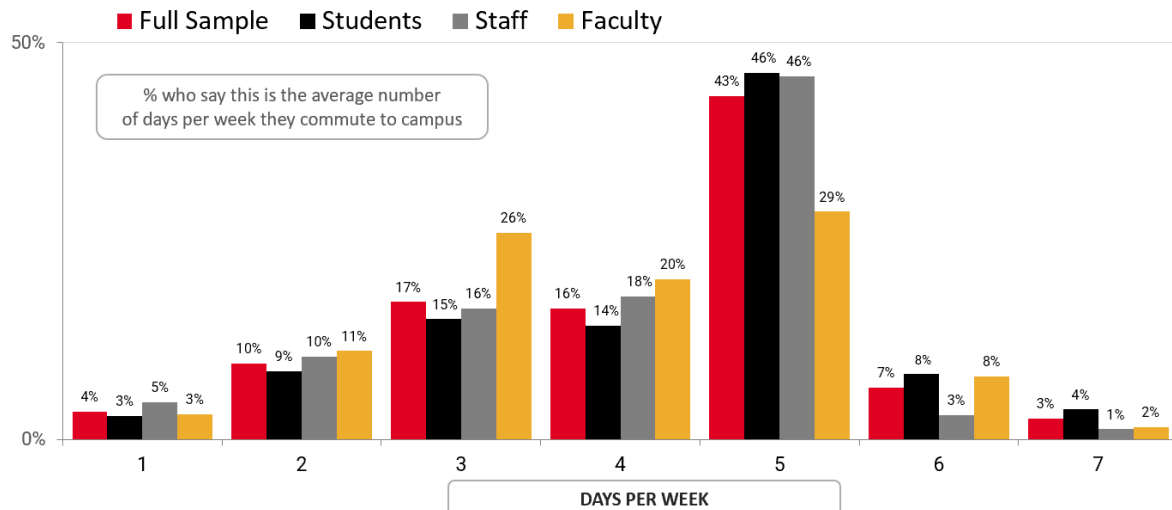
The data show that about half (48%) of the UC community recycles “every time” when at home, but far fewer (31%) do the same when on campus. While students show the lowest rates of recycling on campus (only 26% recycle every time), the gap between at-home and on-campus recycling is largest among faculty (a 27-point gap). Another question in this survey provided respondents with a chance to write their own ideas of what UC should do better regarding sustainability. Many of the responses focused on increasing recycling facilities. However, we should keep in mind that this could be in part due to the fact that *recycling is often one of the first (and sometimes only) sustainability actions to come to people’s minds*, so it’s not surprising to see a focus on that in the open-ended responses.



The survey also measured commuting behavior. These questions were only shown to respondents who indicated that they do commute to campus for classes or work (74% of the full sample;  $n = 1,176$ ) and does not include those who said they either live on campus or do all of their classes or work remotely.

Among all commuters, 31% of commuters say they come to campus 3 days per week or less, and 52% say they come to campus 5 days per week or more (mean = 4.1 days). Among those who commute to campus, only 6% say that carpooling with others is their main mode of transportation when they commute to campus. This rate of carpooling is about equal among students (6%), staff (5%), and faculty (7%).

## A Majority of Commuters Come to Campus 4 or 5 Days per Week, on Average

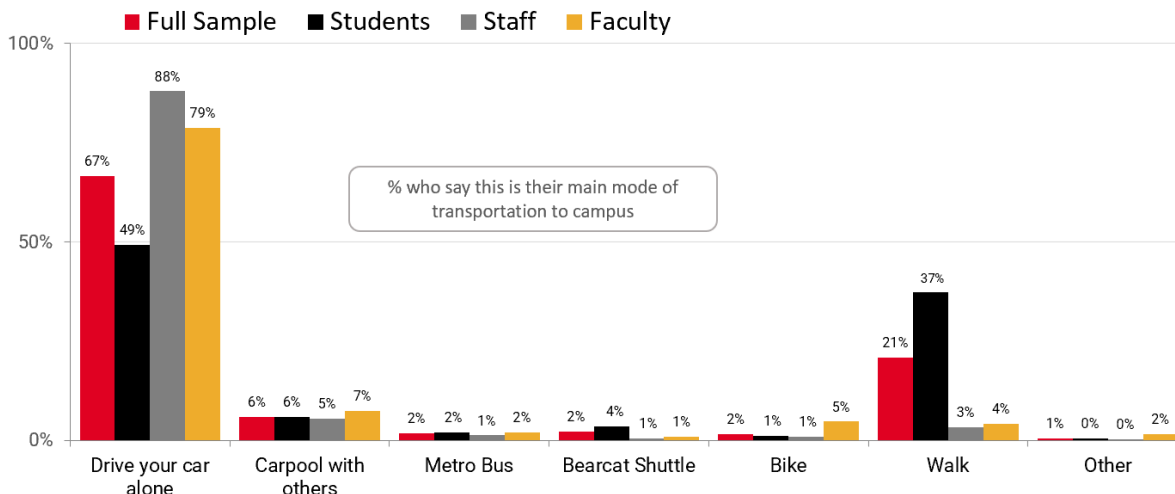


October 2021  
Base: UC students, faculty, and staff who commute to campus (N = 1,176)

"On average, how many days per week do you come to campus?"

Driving a car alone is the most common mode of commuting among students (49%), staff (88%), and faculty (79%). Most students who do not drive alone instead walk to campus (37%). Very few student commuters use the Bearcat Shuttle (4%) or the Metro Bus (2%) as their main mode of commuting.

## Driving a Vehicle Alone is By Far the Most Common Mode of Transportation Among UC Commuters



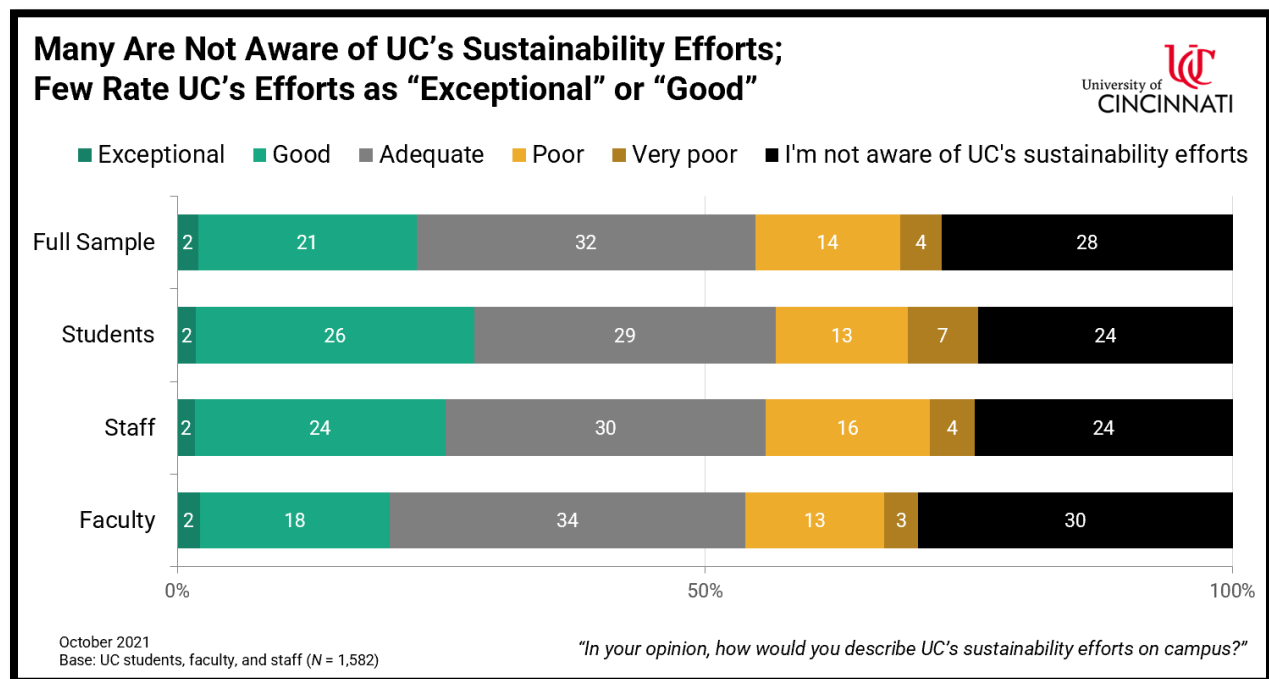
October 2021  
Base: UC students, faculty, and staff who commute to campus (N = 1,176)

"What is your main mode of transportation to campus?"

## Desire for UC Action

Regarding UC's sustainability efforts on campus, this survey found that a minority of the UC community rate them as better than "adequate." That is, only 23% say UC's efforts are either "exceptional" (2%) or "good" (21%), and this was least common among faculty (2% "exceptional," 18% "good").

The data suggest that this is *not* necessarily because people think UC's efforts are poor. Rather, "adequate" was the most common response (32%) and a large number of respondents (28%) said "I'm not aware of UC's sustainability efforts." This indicates that the problem is only partially due to lukewarm perceptions of UC's sustainability efforts, because it is also partially due simply to a lack of awareness of the efforts that UC does engage in.



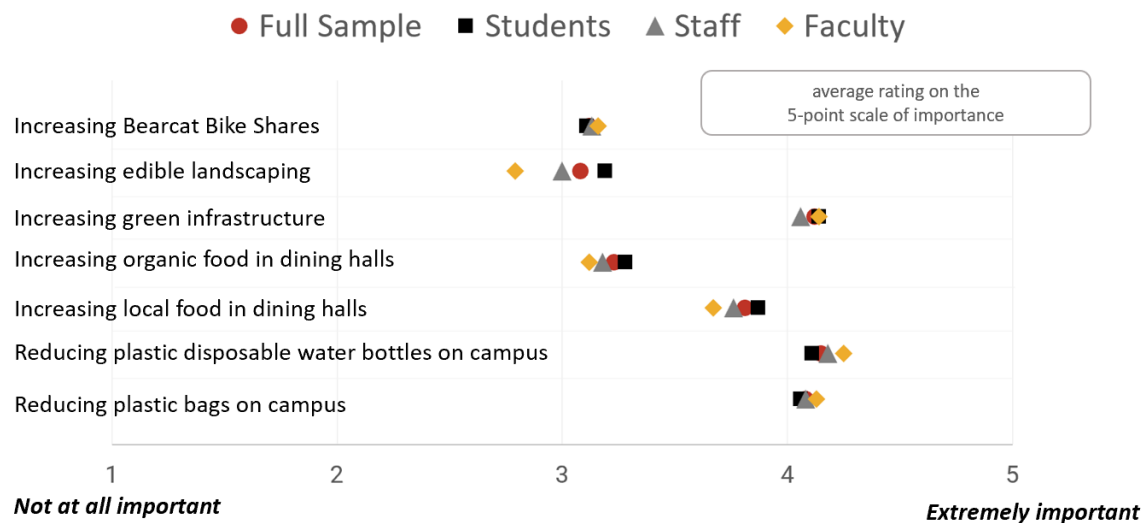
Participants also rated each of seven possible sustainability initiatives on a 5-point scale of importance. The table shows the means of the importance ratings given to each initiative, and reveals that reducing plastic bags, reducing plastic bottles, and increasing green infrastructure were rated as most important.

*Table 1. Average rating of importance given to each sustainability initiative, by group*

<i>Initiative</i>	<i>Full Sample mean</i>	<i>Students mean</i>	<i>Staff mean</i>	<i>Faculty mean</i>
Reducing plastic bags on campus	4.08	4.06	4.08	4.13
Reducing plastic disposable water bottles on campus	4.15	4.11	4.18	4.25
Increasing local food in the dining halls	3.81	3.87	3.76	3.67
Increasing organic food in the dining halls	3.23	3.28	3.18	3.12
Increasing green infrastructure on campus	4.12	4.14	4.06	4.14
Increasing edible landscaping on campus	3.08	3.19	3.00	2.79
Increasing Bearcat Bike Share bikes	3.12	3.11	3.13	3.16

*Note:* Five-point scale from "Not at all important" (1) to "Extremely important" (5).

## Reducing Plastic Waste and Increasing Green Infrastructure Have the Highest Average Ratings of Importance

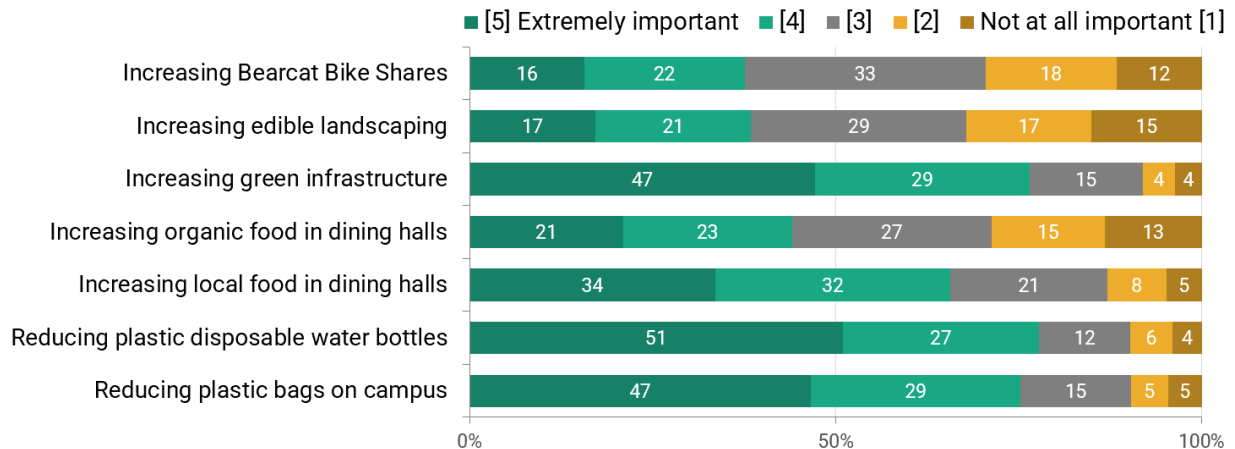


October 2021  
Base: UC students, faculty, and staff (N = 1,582)

"Rate each of the following on a scale of importance, with 1 being "not at all important," and 5 being "extremely important.""

When viewed as the proportion of the full sample who selected the "Extremely important" response option on the scale, we see further evidence that three initiatives rise to the top. In the full sample, 47% said reducing plastic bags on campus was extremely important, and 47% said the same of reducing plastic water bottles. About half (51%) said increasing green infrastructure was extremely important (the maximum point on the scale).

## Reducing Plastic Waste and Increasing Green Infrastructure Are Seen As the Most Important Sustainability Initiatives



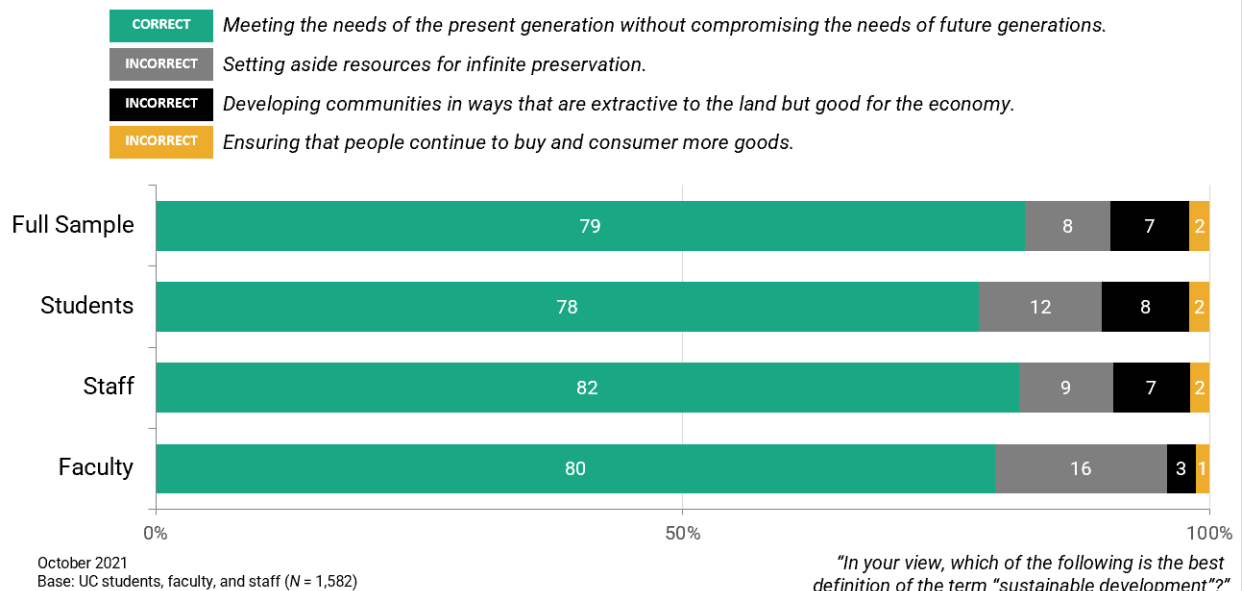
October 2021  
Base: UC students, faculty, and staff (N = 1,582)

"Rate each of the following on a scale of importance, with 1 being "not at all important," and 5 being "extremely important.""

## Knowledge

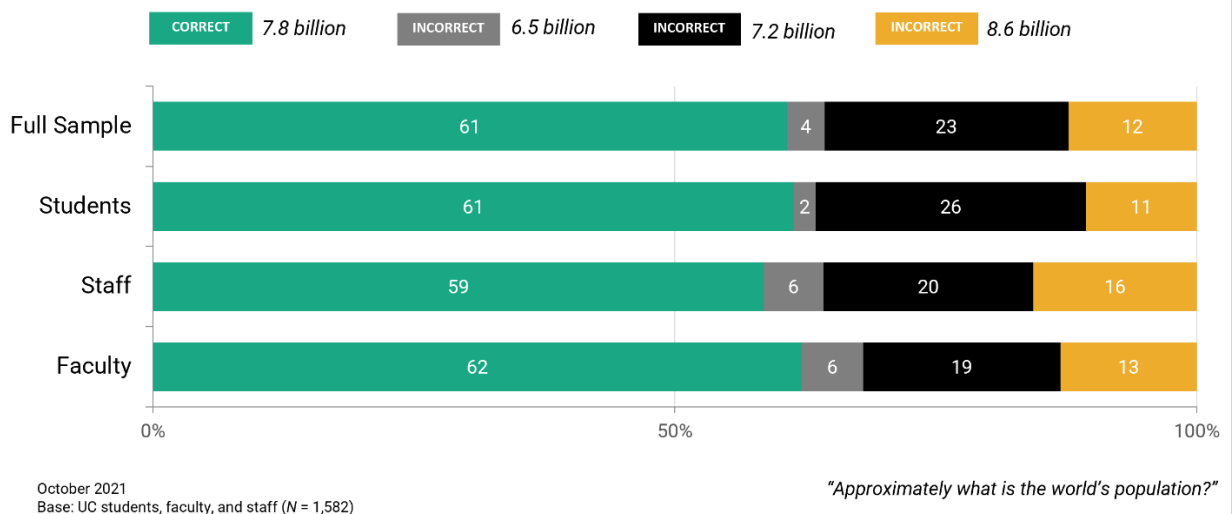
This survey also measured respondents' knowledge levels by testing their awareness of some basic facts related to sustainability. The first question asked participants to identify the correct definition of "sustainable development." Overall, 79% of respondents chose the correct answer, and there was no significant variation between students, staff, and faculty.

### Most Respondents Correctly Identified The Definition of "Sustainable Development"



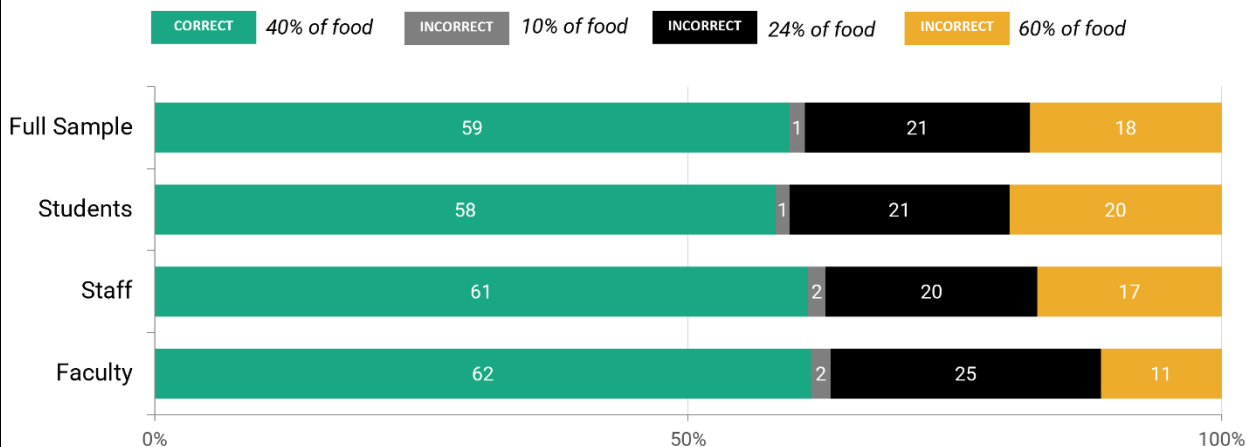
A slight majority of respondents (61%) correctly identified the current world population (7.8 billion). This question may have been difficult because some wrong answers (e.g., 7.2) were close to the correct one.

### Over Half of Respondents Correctly Identified The Current World Population



More than half of respondents (59%) correctly identified the current percentage of food that is wasted in the United States—which is around 40% of food. Among faculty, more than twice as many underestimated food waste compared to those who overestimated (27% vs 11%).

### Over Half of Respondents Correctly Identified The Current % of Food That is Wasted in the U.S.

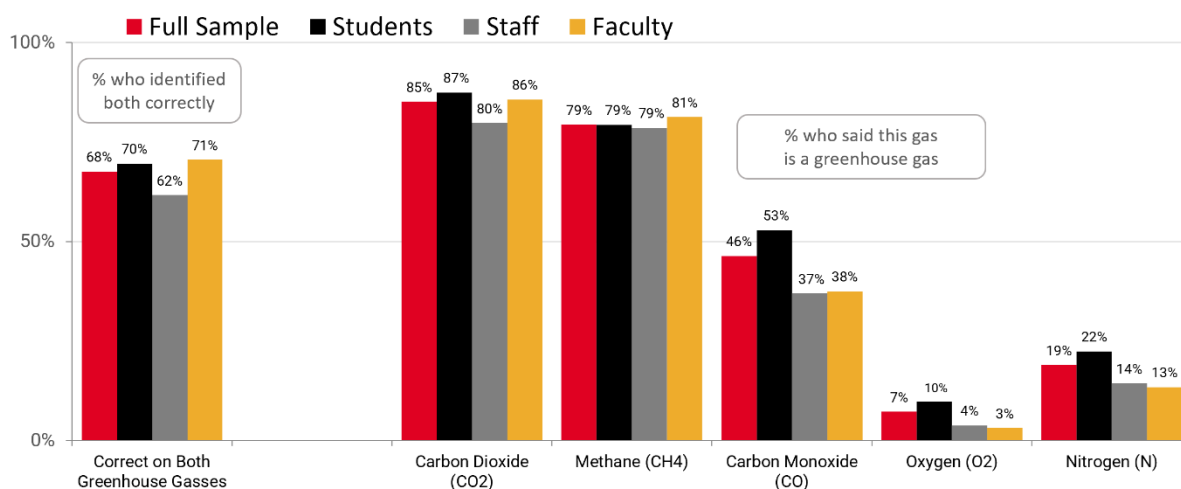


October 2021  
Base: UC students, faculty, and staff (N = 1,582)

"In the U.S., approximately what percentage of food is wasted?"

The survey also asked participants to identify which—out of five gasses—were “greenhouse gasses.” In the full sample, 85% correctly identified carbon dioxide (CO<sub>2</sub>) and 79% correctly identified methane (CH<sub>4</sub>). However, many also incorrectly pointed to carbon monoxide (CO) being as being a greenhouse gas. More students (52%) than faculty (38%) said carbon monoxide is a greenhouse gas.

### About 2 in 4 Respondents Correctly Identified Both CO<sub>2</sub> and CH<sub>4</sub> as Greenhouse Gasses



October 2021  
Base: UC students, faculty, and staff (N = 1,582)

"Which of the following is a 'Greenhouse Gas?'"