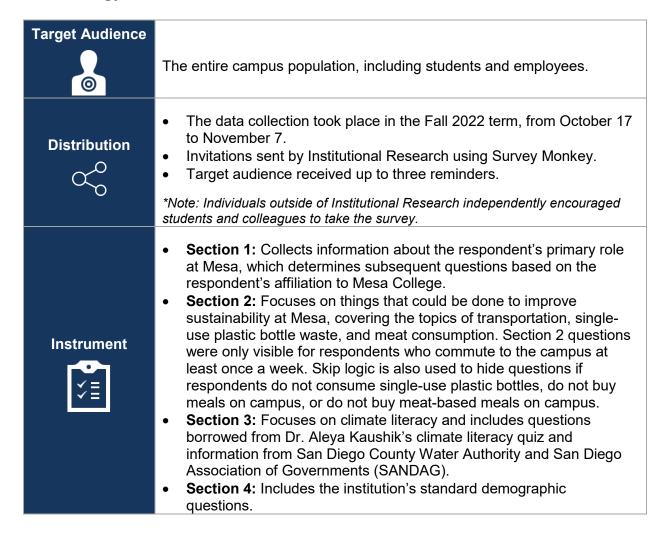


2022 Environmental Sustainability Survey Results

Introduction

One of the strategic objectives in Mesa 2030 calls for the development of a climate action plan. In support of this objective, the Environmental Sustainability Committee (ESC) created the first iteration of the Sustainability Survey in consultation with the Institutional Research Office (IR). The purpose of the Sustainability Survey is to collect actionable data to inform San Diego Mesa College's first Climate Action Plan and other sustainability initiatives. Additionally, the results from the survey will help to establish a baseline that will enable the College to measure progress over time. A climate literacy assessment was embedded in the survey to support San Diego Mesa College in obtaining a STARS rating from the Association for the Advancement of Sustainability in Higher Education (AASHE).

Methodology





Sampling

- Students: IR retrieved email addresses from the Institutional Research Database (IRD). As of October 17, there were 18,424 students enrolled at Mesa. After removing students exclusively enrolled in CCAP or ACP courses, the target population included N=16,835 students. After removing minors (students under the age of 18 as of October 17), a total of 16,276 students were found eligible to participate and were sent an invitation.
- Employees: IR retrieved 1,597 email addresses from the San Diego Mesa College distribution list on October 17. An invitation was sent to every email in this list.

*Note. Because this survey was expected to inform Mesa's first climate action plan, there was a desire to enable the entire campus community to provide their input through this survey. Future iterations of this survey should consider using a random sample to reduce self-selection bias.

Response Rate

Students: 12% (n=2,029)Employees: 17% (n=269)

*Note: Only complete responses were included in the analysis.

Report Organization

The report begins with a list of recommendations based on the findings from the survey. Following the recommendations, the survey results are presented. The results are divided into five sections: (1) About respondents, (2) Commuting to Mesa Campus, (3) On-Campus Single-Use Plastic Bottle Consumption, (4) On-Campus Meat Consumption, and (5) Climate Literacy at Mesa. The first section summarizes information about the demographics and other characteristics of the respondents. The second, third, and fourth sections describe the habits of respondents concerning these three topics and look at the factors that might help shift their behavior. The last section summarizes findings regarding the climate literacy assessment designed by ESC and the current state of learning and teaching of sustainability-related topics at Mesa. In most places, the results make a distinction between different kinds of respondents: students, faculty employees, and non-faculty employees. The latter is an umbrella label to refer to all Mesa employees who are not faculty. At the end of the report, the appendix includes written-in responses from survey participants coded based on the most prominent themes that emerged from the analysis.



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Recommendations

Commuting to Mesa Campus

- Driving alone to campus in a gas car is the least sustainable mode of commuting, yet it
 is the number one choice for commuting to campus as indicated by all respondent
 groups. Initiatives that target those who drive to campus in a gas car by themselves
 could have a greater impact in shifting individuals to choose more sustainable modes of
 commuting.
- The survey found non-faculty employees to be more likely to commute to campus five
 days a week or more. Non-faculty employees were also more likely to commute by
 driving in a gas car by themselves. Providing more remote work opportunities for nonfaculty employees would reduce negative environmental impacts incurred from frequent
 gas car trips.
- 3. Mesa needs to advocate for more convenient bus/trolley routes to campus. Close to half of students, faculty, and non-faculty employees reported they were somewhat likely or very likely to shift to a more sustainable mode of commute if there were more convenient bus or trolley routes to Mesa.
- 4. The initiatives below are likely to be successful at shifting students to more sustainable modes of commute. Nearly half of student respondents considered them somewhat likely or very likely to shift their behavior:
 - a. Offering incentives for choosing sustainable modes of commute (49%).
 - b. Posting information about how sustainable modes of commute help Mesa reach its climate goals (45%).
 - c. Making it easy to find a carpool to campus (42%).
 - d. Offering free Pronto cards (42%).

On-Campus Single-Use Plastic Beverage Bottle Consumption

- 5. Initiatives to reduce the consumption of single-use plastic beverage bottles while oncampus are likely to succeed based on the high rates at which students, faculty, and non-faculty indicated they were somewhat likely or very likely to shift their behavior. The following initiatives received the support of at least 61% of respondents in the student, faculty, and non-faculty groups:
 - a. Installing more convenient water bottle refill stations on campus.
 - b. Posting information of the water quality at bottle refill stations.
 - c. Access to very low-cost refillable water bottles.
 - d. Making water jugs and non-plastic cups available for non-campus events.
- 6. As noted above, making water jugs and non-plastic cups available for campus events might significantly reduce the consumption of plastic by all groups, especially among non-faculty employees. Non-faculty employees are currently more likely than any other group to consume plastic bottles on campus. This might be due to them spending more time on campus and being tempted by the availability of plastic bottles at on-campus events.



On-Campus Meat Consumption

7. The negative impact of meat consumption on the environment is enormous. Mesa can considerably reduce its footprint by reducing the amount of meat consumed on campus. A majority (62% or more) of respondents in the student, faculty, and non-faculty groups indicated two options that were somewhat likely or very likely to shift meat consumption patterns on campus: (1) offering plant-based choices of equal or cheaper prices, and (2) offering plant-based choices that taste the same or better.

Climate Literacy

8. Only 40% of student respondents indicated that topics such as climate change, global warming, environmental justice, or environmental sustainability have been covered in at least one of their courses. This suggests that there is ample room to improve climate literacy by incorporating these topics in instruction. Offering faculty incentives to integrate these topics into their curricula could lead to an increase in climate literacy at Mesa.



Results

About Respondents

1. Over a quarter (28%) of student respondents identified as first-year students. Among faculty respondents, roughly half (54%) identified as full-time and the other half (46%) as adjunct. Among non-faculty respondents, over half (56%) identified as classified professional/supervisor and almost one-third (32%) identified as part-time/NANCE employees.

Table 1: Affiliation to Mesa

		Respondents	Percent
	First-year student	571	28%
Student	Continuing student	1,458	72%
	Subtotal	2,029	100%
	Full-time faculty	82	54%
Faculty	Adjunct faculty	70	46%
	Subtotal	152	100%
	Classified professional/supervisor	66	56%
	Part-time/NANCE	37	32%
Non-Faculty	Manager	1	1%
	Administrator	13	11%
	Subtotal	117	100%
	Total	2,298	

2. The School of Math and Natural Sciences contributed the greater number of student and faculty respondents (18% and 17%, respectively), closely followed by the School of Social/Behavioral Sciences and Multicultural Studies (15% each).

Table 2: School of Student & Faculty Respondents

School	Students	Faculty
Social/Behavioral Sciences/Multicultural	15%	15%
Learning/Academic Support	2%	4%
Exercise Sciences/Health Education/Dance/Athletics	4%	5%
Math/Natural Sciences	18%	17%
Humanities	3%	12%
Health Sciences/Public Service	19%	11%
Business/Technology	23%	9%
Student Development	1%	9%
Student Success/Equity	<1%	9%
Arts/Languages	9%	11%
Undecided major	7%	-
Total	100%	100%



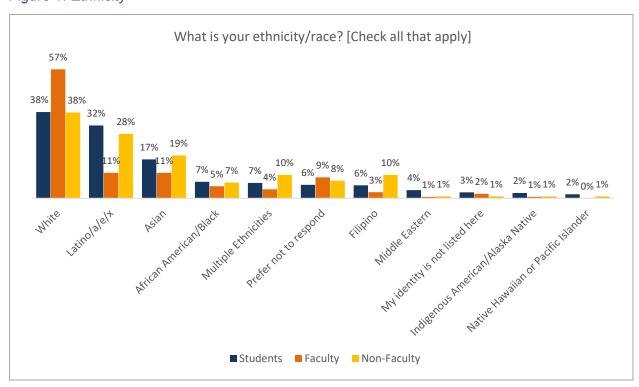
3. A plurality of non-faculty respondents reported working in Student Services (44%).

Table 3: Area of Work for Non-Faculty Employees

Area	Non-Faculty
Instruction	27%
Administrative Services	23%
Student Services	44%
Leadership/Administration	5%
Total	100%

4. A plurality of respondents identified as White: 38% of students, 57% of faculty employees, and 38% on non-faculty employees. Among student respondents, White students and Asian students were over-represented in the sample by roughly 10 and 7 percentage points respectively, while Latino/a/e/x students were under-represented by roughly 9 percentage points. Other student groups were generally similar in ethnicity to the population in the Fall 2022 semester.

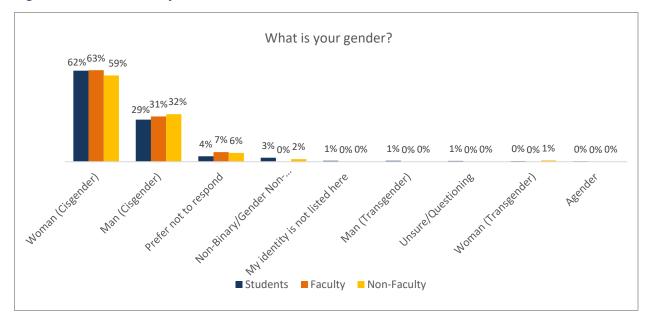
Figure 1: Ethnicity



5. A majority of respondents identified as cisgender female: 62% of students, 63% of faculty employees, and 59% of non-faculty employees. Among students, the representation of cisgender female students was 7 percentage points higher than the population of interest.

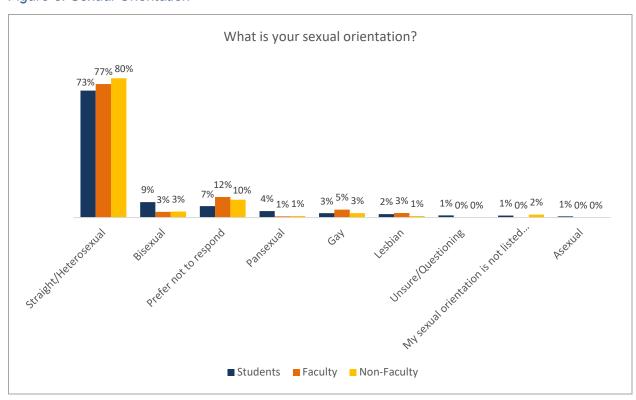


Figure 2: Gender Identity



6. Twenty percent of student respondents identified as members of the LGBTQ+ community, followed by 11% of faculty, and 9% of non-faculty employees.

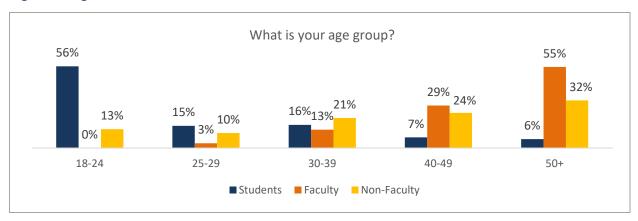
Figure 3: Sexual Orientation





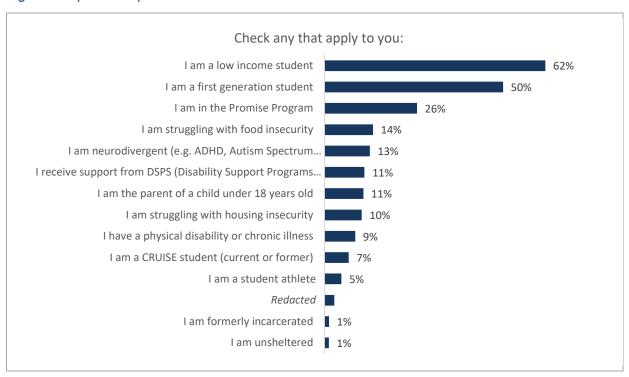
7. Student respondents were slightly older than the population of interest. Students 25 years or older represented 44% of respondents compared to 35% of the population of interest. Faculty respondents tended to be older than non-faculty respondents: 84% of faculty responded were 40 years of age or older, compared to 56% of non-faculty respondents.

Figure 4: Age



8. Student respondents reported experiencing several risk-factors, including being low income (62%), first-generation (50%), food insecurity (14%), being neurodivergent (13%), receiving DSPS (11%), being parents (11%), and housing insecurity (10%). On the other hand, Promise students and student athletes were well represented among respondents (26% and 5%, respectively).

Figure 5: Special Populations

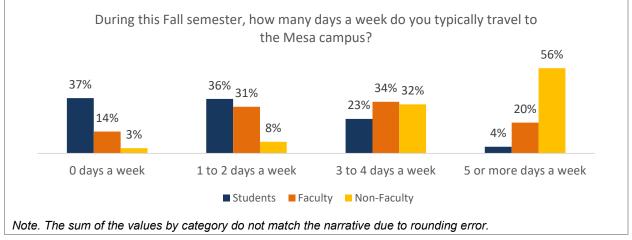




Commuting to Mesa Campus

9. Student respondents were less likely than employees to travel to the Mesa campus: 73% of student respondents typically travel to campus between zero and two days. Among employee respondents, non-faculty employees were more likely to travel to campus daily: 89% of non-faculty employees typically travel to Mesa 3 or more days a week, compared to 55% of faculty.

Figure 6: Number of Days Respondents Commute to Mesa



10. Among 2,298 total respondents, 1,529 or 67% reported that they travel to the Mesa campus at least once a week.

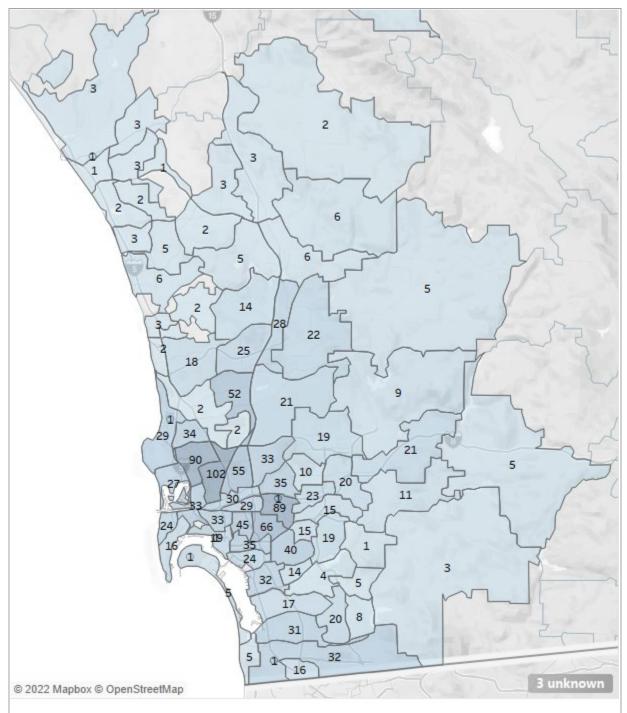
Figure 7: Number of Commuters



11. Mesa's ZIP code, 92111, is the ZIP code from which commuting respondents most frequently travel to campus (7%), followed by neighboring 92117 (Bay Park; 6%), and nonneighboring 92115 (Rolando; 6% of 1,529 commuters). However, even the highest frequencies were small. Commuters travel to Mesa from 101 unique ZIP codes that go as South as the border with Mexico, as North as Victorville, as East as El Centro, and as West as Los Angeles.



Figure 8: Map - Number of Mesa Commuters by ZIP Code Where Commute Originates

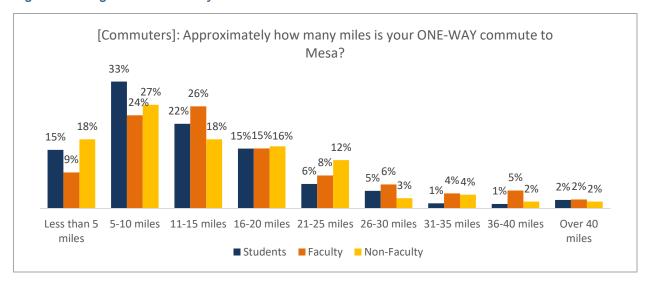


Note. 18 respondents from 14 distant ZIP codes were hidden from the view to improve map resolution. Invalid ZIP codes were omitted.



12. Nearly half (48%) of student respondents commuted from within 10 miles of the Mesa campus. Among employee respondents, faculty were more likely to commute longer distances: only one-third (33%) of faculty had a commute of 10 or less miles, compared to 44% of non-faculty employees.

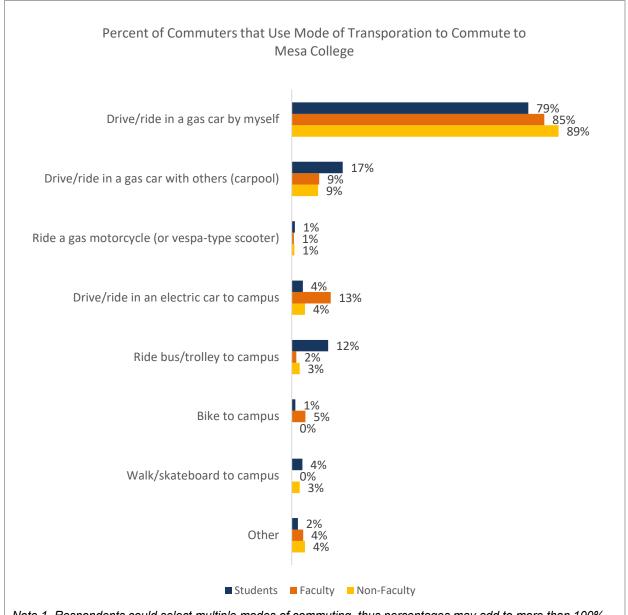
Figure 9: Length of a One-Way Commute



13. Driving alone in a gas car was the mode of transportation most likely used by respondents to commute to Mesa (79% of students, 85% of faculty, and 89% of non-faculty). Student respondents reported carpooling (17%) or riding the bus/trolley to campus (12%) at higher rates than employee respondents do; nine percent of faculty and non-faculty reported carpooling to campus while 2% of faculty and 3% of non-faculty reported riding the bus/trolley to campus. Faculty reported driving an electric car at higher rates (13%) than non-faculty and students (4% each).



Figure 10: Modes of Transportation Used by Commuters

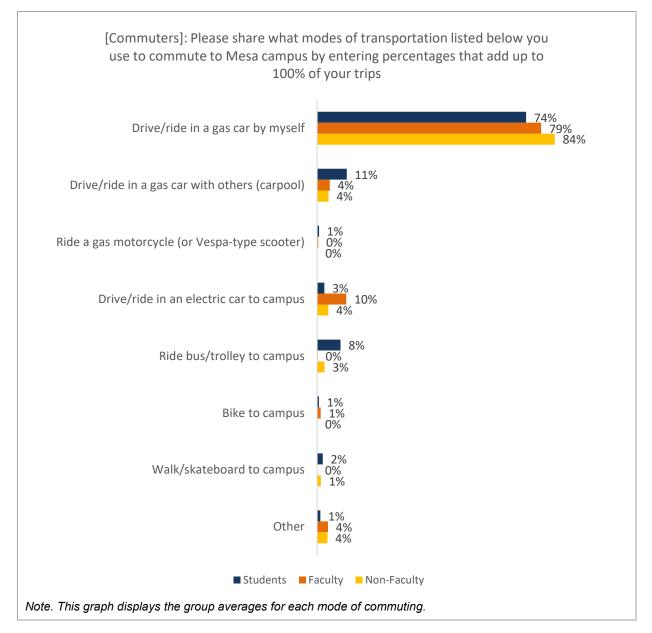


Note 1. Respondents could select multiple modes of commuting, thus percentages may add to more than 100%. Note 2. Among the 37 respondents who selected "other," 43% mentioned using a ridesharing service, 38% mentioned driving a hybrid car, and 11% mentioned being dropped off.

14. One out of four (26%) trips made by student respondents to the Mesa campus involved modes of transportation more sustainable than driving in a gas car by themselves: 11% of student trips involved carpooling and 8% involved riding the bus or trolley. Among employees, 79% of trips by faculty and 84% of trips by non-faculty involved driving by themselves in a gas car.



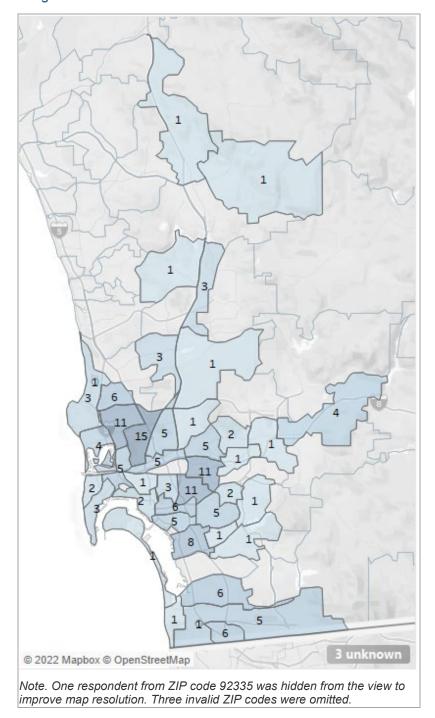
Figure 11: Trips by Mode of Transportation





15. Mesa's ZIP code (92111) was the ZIP code from which respondents most frequently ride the bus or trolley. Fifteen (9%) of the 162 respondents that indicated they ride the bus or trolley at least some of the time when commuting to Mesa travel from this ZIP code.

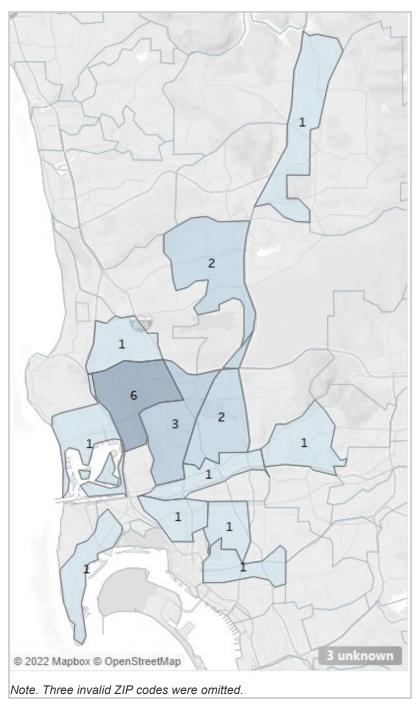
Figure 12: Map - Number of Commuters Who Ride the Bus/Trolley to Campus by ZIP Code Where Commute Originates





16. ZIP code 92117, which shares the Western boundary of Mesa's ZIP code, was the zip code from which respondents most frequently biked to campus. Twenty-seven percent of the 22 respondents that indicated they ride a bike to campus at least some of the time when commuting to Mesa travel from this ZIP code.

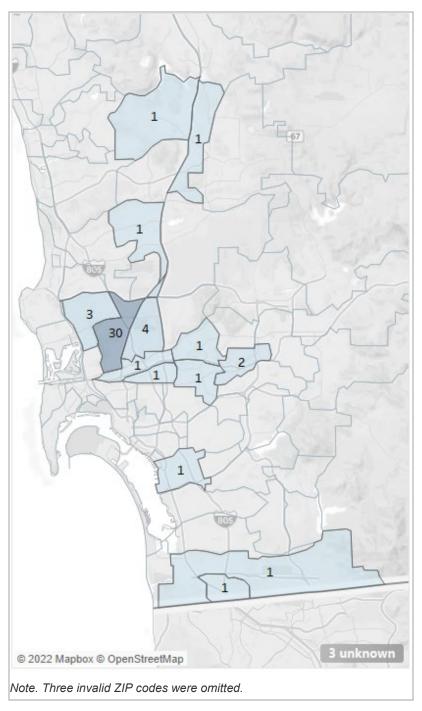
Figure 13: Map - Number of Commuters Who Bike to Campus by ZIP Code Where Commute Originates





17. Respondents commuting from Mesa's ZIP code (92111) were more likely to walk or skate board to campus than respondents commuting from any other ZIP code. Sixty-one percent of the 49 respondents that indicated they walk or skateboard at least some of the time when commuting to Mesa come from this ZIP code.

Figure 14: Map - Number of Commuters Who Walk/Skateboard to Campus by ZIP Code Where Commute Originates

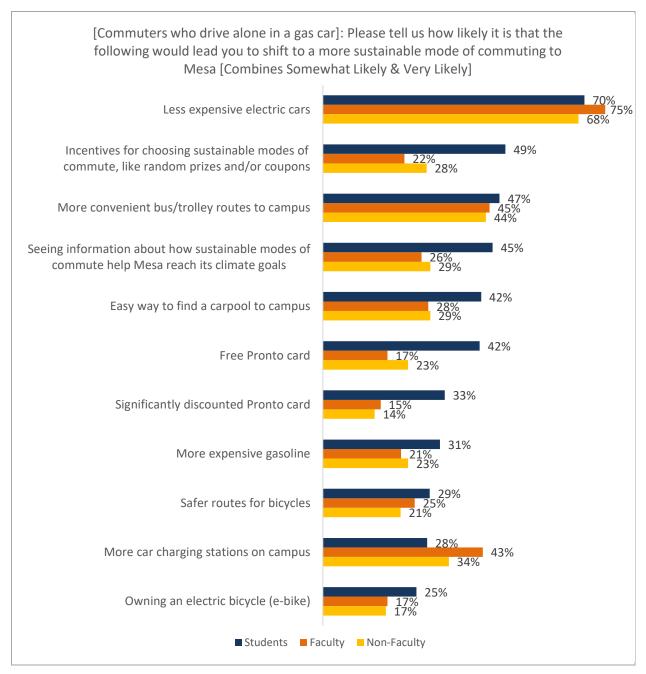




18. Among the survey respondents who reported driving to campus alone in a gas car, the number one factor that would lead them to shift to a more sustainable mode of commuting to Mesa was less expensive electric cars: 70% of students, 75% of faculty, and 68% of non-faculty reported it was somewhat likely or very likely that this factor would lead them to shift to a more sustainable mode of commuting. Incentives for choosing sustainable modes of commute ranked as the number two factor among students (49%) but not among faculty (22%) or non-faculty (28%). More convenient bus/trolley routes ranked number two for faculty (45%) and non-faculty employees (44%), and number three for students (47%). Overall, student respondents were more open to shifting to more sustainable modes of commuting. At least 4 out of 10 student respondents reported that seeing information about how sustainable modes of commute help Mesa reach its climate goals, having easy ways to find a carpool to campus, or receiving a free Pronto card would lead them to shift to more sustainable modes of commuting to Mesa.



Figure 15: What Could Shift Lone-Drivers to a More Sustainable Mode of Commuting to Mesa



19. Student respondents who reported using carpooling in a gas car to Mesa as a mode of transportation at least some of the time were even more open to shifting to more sustainable modes of transportation, as shown in the figure below. At least 6 out of 10 student respondents reported that less expensive electric cars, more convenient bus/trolley routes to campus, a free Pronto card, and easy ways to find a carpool to campus would lead them to shift to more sustainable modes of commuting to Mesa.



Figure 16: Factors that Could Shift Car-Poolers to a More Sustainable Mode of Commuting to Mesa

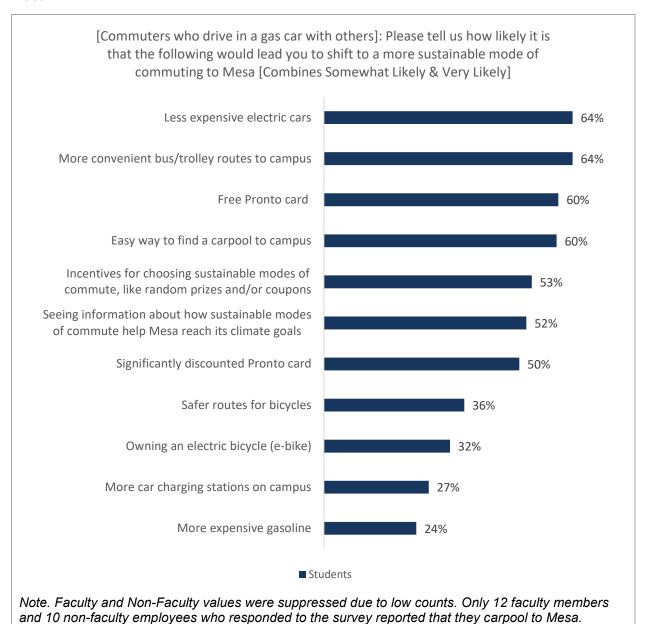




Table 4: Factors that Could Shift Lone-Drivers & Car-Poolers to a More Sustainable Mode of Commuting to Mesa

Please tell us how likely it is that the			Dr			in a gas ar			
_	you to shift to a more	Stud	lents	Fac	ulty	Non-Faculty		Stud	lents
sustainable mode of	commuting to Mesa	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Free Pronto card	Very likely	238	23%	10	9%	10	10%	85	39%
(public transit bus	Somewhat likely	189	19%	9	8%	13	13%	47	21%
and trolley pass, currently costs	Somewhat unlikely	122	12%	11	10%	8	8%	24	11%
\$177 per	Very unlikely	368	36%	79	72%	63	62%	45	20%
semester)	I don't know	102	10%	1	1%	7	7%	19	9%
,	Total	1019	100%	110	100%	101	100%	220	100%
Significantly	Very likely	139	14%	5	5%	3	3%	48	22%
discounted Pronto	Somewhat likely	193	19%	12	11%	11	11%	62	28%
card	Somewhat unlikely	145	14%	9	8%	10	10%	26	12%
	Very unlikely	423	42%	83	75%	73	72%	63	29%
	I don't know	119	12%	1	1%	4	4%	21	10%
	Total	1019	100%	110	100%	101	100%	220	100%
More convenient	Very likely	250	25%	25	23%	16	16%	90	41%
bus/trolley routes	Somewhat likely	231	23%	24	22%	28	28%	50	23%
to campus	Somewhat unlikely	133	13%	10	9%	8	8%	26	12%
	Very unlikely	308	30%	48	44%	45	45%	39	18%
	I don't know	97	10%	3	3%	4	4%	15	7%
	Total	1019	100%	110	100%	101	100%	220	100%
Easy way to find a	Very likely	204	20%	9	8%	7	7%	71	32%
carpool to campus	Somewhat likely	227	22%	22	20%	22	22%	60	27%
	Somewhat unlikely	160	16%	20	18%	21	21%	36	16%
	Very unlikely	315	31%	57	52%	46	46%	31	14%
	I don't know	113	11%	2	2%	5	5%	22	10%
	Total	1019	100%	110	100%	101	100%	220	100%
Owning an electric	Very likely	148	15%	10	9%	6	6%	40	18%
bicycle (e-bike)	Somewhat likely	107	11%	9	8%	11	11%	31	14%
	Somewhat unlikely	134	13%	9	8%	15	15%	33	15%
	Very unlikely	520	51%	80	73%	64	63%	93	42%
	I don't know	110	11%	2	2%	5	5%	23	10%
	Total	1019	100%	110	100%	101	100%	220	100%
Safer routes for	Very likely	158	16%	14	13%	10	10%	42	19%
bicycles	Somewhat likely	133	13%	13	12%	11	11%	37	17%
	Somewhat unlikely	129	13%	11	10%	12	12%	41	19%
	Very unlikely	475	47%	70	64%	62	61%	71	32%
	I don't know	124	12%	2	2%	6	6%	29	13%
	Total	1019	100%	110	100%	101	100%	220	100%



Institutional Research

More expensive	Very likely	156	15%	9	8%	4	4%	24	11%
gasoline	Somewhat likely	163	16%	14	13%	19	19%	28	13%
	Somewhat unlikely	145	14%	22	20%	24	24%	33	15%
	Very unlikely	447	44%	63	57%	47	47%	96	44%
	I don't know	108	11%	2	2%	7	7%	39	18%
	Total	1019	100%	110	100%	101	100%	220	100%
Incentives for	Very likely	232	23%	9	8%	8	8%	52	24%
choosing	Somewhat likely	265	26%	15	14%	20	20%	65	30%
sustainable modes of commute, like	Somewhat unlikely	185	18%	17	15%	21	21%	37	17%
random prizes	Very unlikely	231	23%	66	60%	46	46%	34	15%
and/or coupons	I don't know	106	10%	3	3%	6	6%	32	15%
	Total	1019	100%	110	100%	101	100%	220	100%
Seeing information	Very likely	167	16%	8	7%	8	8%	36	16%
about how	Somewhat likely	295	29%	21	19%	21	21%	78	35%
sustainable modes of commute help	Somewhat unlikely	190	19%	17	15%	19	19%	42	19%
Mesa reach its	Very unlikely	250	25%	60	55%	45	45%	36	16%
climate goals	I don't know	117	11%	4	4%	8	8%	28	13%
	Total	1019	100%	110	100%	101	100%	220	100%
More car charging	Very likely	128	13%	24	22%	17	17%	25	11%
stations on	Somewhat likely	156	15%	23	21%	17	17%	34	15%
campus	Somewhat unlikely	140	14%	8	7%	13	13%	33	15%
	Very unlikely	394	39%	48	44%	46	46%	77	35%
	I don't know	201	20%	7	6%	8	8%	51	23%
	Total	1019	100%	110	100%	101	100%	220	100%
Less expensive	Very likely	489	48%	57	52%	49	49%	86	39%
electric cars	Somewhat likely	223	22%	26	24%	20	20%	54	25%
	Somewhat unlikely	99	10%	6	5%	9	9%	21	10%
	Very unlikely	106	10%	19	17%	16	16%	25	11%
	I don't know	102	10%	2	2%	7	7%	34	15%
	Total	1019	100%	110	100%	101	100%	220	100%

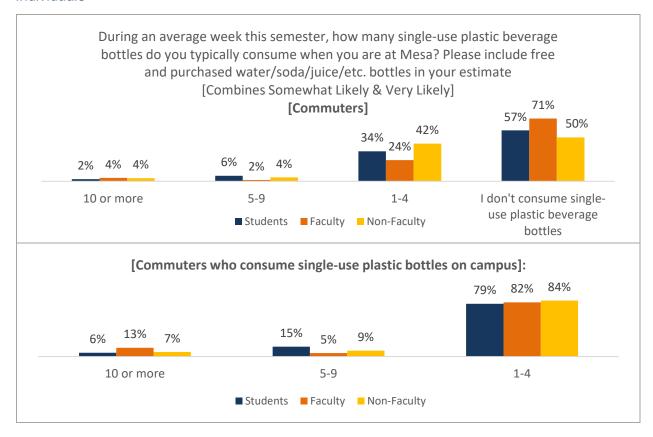
20. Five percent of commuters selected "other" as a factor that would lead them to shift to a more sustainable mode of commuting to Mesa and entered a written response. The number one theme that emerged was not a factor, but justification as to why their current mode of transportation is the best option for them. Having more time-efficient public transportation, and improved accessibility tied for second place. Refer to the Appendix to see a coded list of written-in responses.



On-Campus Single-Use Plastic Beverage Bottle Consumption

21. Non-faculty employees were more likely to consume single-use plastic bottles on campus (50%), followed by students (43%), and faculty (29%). The majority of single-use plastic bottle consumers reported they typically consumed between one and four bottles per week (79% of students, 82% of faculty, and 84% of non-faculty).

Figure 17: Number of Single-Use Plastic Bottles Consumed on Campus per Week by Individuals



22. Among students, faculty, and non-faculty employees, having more convenient water bottle refill stations on campus was the factor to most likely lead them to purchase fewer-single use plastic beverage bottles while on campus (85%, 71%, and 74%, respectively, reported it was somewhat likely or very likely). The availability of water jugs and non-plastic cups for campus events was identified as another factor with a high level of influence across all three groups of respondents: 78% of students, 71% of faculty, and 84% of non-faculty reported this factor was somewhat likely or very likely to reduce their consumption. Other factors deemed somewhat likely or very likely to reduce consumption by a majority of students, faculty, and non-faculty include (1) posted evidence of water quality at bottle refills, (2) access to very log-cost refillable water bottles, and (3) incentives for foregoing single-use



plastic beverage bottles. These findings suggest that efforts to reduce single-use plastic bottle consumption could be highly effective.

Figure 18: Factors that Could Shift On-Campus Single-Use Plastic Bottle Consumers to Reduce Consumption

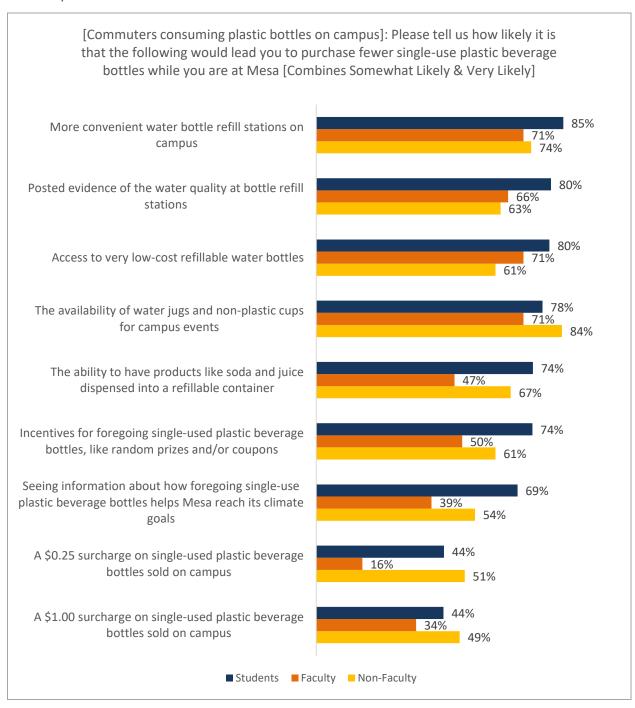




Table 5: Factors that Could Shift On-Campus Single-Use Plastic Bottle Consumers to Reduce Consumption

Please tell us how likely it is that the following would lead you to purchase fewer single-use		Commuters who typically consume one or more single-use plastic beverage bottles per week						
plastic beverage bottle		Students Fa			ulty	Non-F	Non-Faculty	
Mesa.		Count	Percent	Count	Percent	Count	Percent	
More convenient	Very likely	330	60%	23	61%	31	54%	
water bottle refill	Somewhat likely	134	24%	4	11%	11	19%	
stations on campus	Somewhat unlikely	38	7%	2	5%	7	12%	
	Very unlikely	27	5%	7	18%	4	7%	
	I don't know	19	3%	2	5%	4	7%	
	Total	548	100%	38	100%	57	100%	
Posted evidence of	Very likely	288	53%	18	47%	23	40%	
the water quality at	Somewhat likely	153	28%	7	18%	13	23%	
bottle refill stations	Somewhat unlikely	50	9%	2	5%	8	14%	
	Very unlikely	27	5%	9	24%	9	16%	
	I don't know	30	5%	2	5%	4	7%	
	Total	548	100%	38	100%	57	100%	
The ability to have	Very likely	267	49%	10	26%	17	30%	
products like soda	Somewhat likely	140	26%	8	21%	21	37%	
and juice dispensed	Somewhat unlikely	52	9%	6	16%	8	14%	
into a refillable container	Very unlikely	51	9%	12	32%	8	14%	
Container	I don't know	38	7%	2	5%	3	5%	
	Total	548	100%	38	100%	57	100%	
Access to very low-	Very likely	292	53%	13	34%	17	30%	
cost refillable water	Somewhat likely	146	27%	14	37%	18	32%	
bottles	Somewhat unlikely	45	8%	3	8%	11	19%	
	Very unlikely	40	7%	6	16%	9	16%	
	I don't know	25	5%	2	5%	2	4%	
	Total	548	100%	38	100%	57	100%	
The availability of	Very likely	287	52%	20	53%	25	44%	
water jugs and non-	Somewhat likely	138	25%	7	18%	23	40%	
plastic cups for	Somewhat unlikely	46	8%	4	11%	3	5%	
campus events	Very unlikely	34	6%	6	16%	5	9%	
	I don't know	43	8%	1	3%	1	2%	
	Total	548	100%	38	100%	57	100%	
Incentives for foregoing single-used plastic beverage	Very likely	255	47%	9	24%	17	30%	
	Somewhat likely	151	28%	10	26%	18	32%	
	Somewhat unlikely	61	11%	5	13%	11	19%	
bottles, like random prizes and/or	Very unlikely	36	7%	12	32%	10	18%	
coupons	I don't know	45	8%	2	5%	1	2%	
•	Total	548	100%	38	100%	57	100%	



Seeing information	Very likely	214	39%	7	18%	13	23%
about how foregoing	Somewhat likely	164	30%	8	21%	18	32%
single-use plastic	Somewhat unlikely	76	14%	7	18%	12	21%
beverage bottles helps Mesa reach its	Very unlikely	47	9%	15	39%	12	21%
climate goals	I don't know	47	9%	1	3%	2	4%
	Total	548	100%	38	100%	57	100%
A \$0.25 surcharge on	Very likely	119	22%	2	5%	11	19%
single-used plastic	Somewhat likely	121	22%	4	11%	18	32%
beverage bottles sold	Somewhat unlikely	107	20%	8	21%	8	14%
on campus	Very unlikely	123	22%	21	55%	14	25%
	I don't know	78	14%	3	8%	6	11%
	Total	548	100%	38	100%	57	100%
A \$1.00 surcharge on	Very likely	150	27%	7	18%	21	37%
single-used plastic	Somewhat likely	89	16%	6	16%	7	12%
beverage bottles sold	Somewhat unlikely	82	15%	4	11%	8	14%
on campus	Very unlikely	149	27%	17	45%	15	26%
	I don't know	78	14%	4	11%	6	11%
	Total	548	100%	38	100%	57	100%

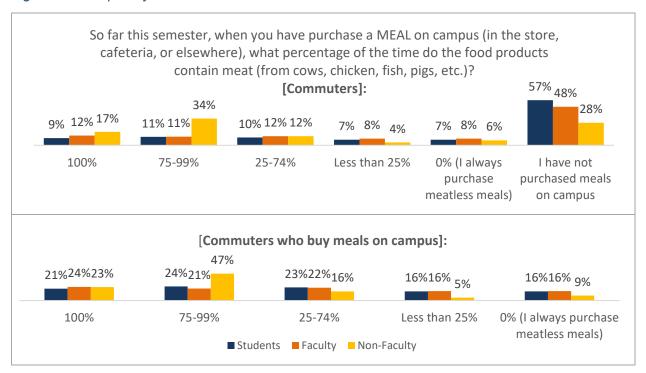
23. Two percent of all on-campus single-use plastic bottle consumers selected "other" as a factor that would lead them to reduce single-use plastic bottle consumption and entered a written response. The number one theme that emerged was not a factor, but an expression of opposition to change. Refill stations and offering free re-usable containers were other common themes. Refer to the Appendix to see a coded list of written-in responses.



On-Campus Meat Consumption

24. Students reported purchasing meals on campus at lower rates than employees did. Less than half of students respondents (43%) purchased meals on campus during the fall semester, compared to 52% if faculty and 72% of non-faculty. Among respondents who purchase meals on campus, non-faculty employees were more likely to buy meat-based meals; three out of four non-faculty respondents indicated that when they buy meals on campus, 75% to 100% of the time the meals are meat-based, compared to less than half of student respondents (45%) and faculty respondents (45%).

Figure 19: Frequency of Meat-Based Meal Purchases



25. The majority of student, faculty, and non-faculty respondents deemed it somewhat likely or very likely that plant-based choices that cost the same or less (68%, 71%, and 62%, respectively) and plant-based choices that taste the same or better (67%, 71%, and 66%, respectively) would lead them to choose plant-based meals while at Mesa. Incentives for choosing plant-based meals and seeing information about how choosing plant-based meals helps Mesa reach its climate goals were also deemed persuasive by over half of student respondents (62% and 56%, respectively).



Figure 20: Factors that Could Shift Buyers of Meat-Based Meals to Choose Plant-Based Meals on Campus.

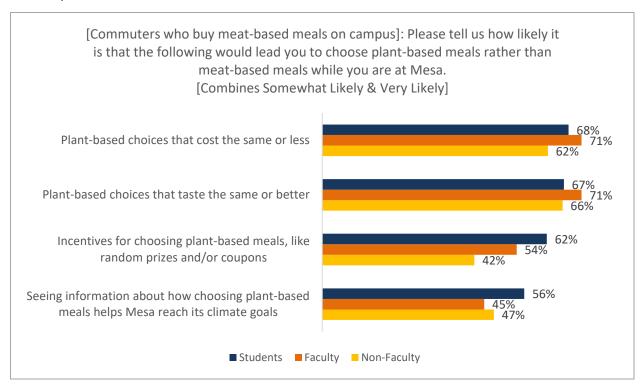


Figure 21: Factors that Could Shift Buyers of Meat-Based Meals to Choose Plant-Based Meals on Campus.

Please tell us how likely it is that the following		Commuters who purchase meat-based meals on campus						
· ·	would lead you to choose plant-based meals rather than meat-based meals while you are		Students		Faculty		aculty	
	lesa.	Count	Percent	Count	Percent	Count	Percent	
Plant-based choices	Very likely	183	39%	29	52%	23	31%	
that taste the same or better	Somewhat likely	128	27%	11	20%	26	35%	
or better	Somewhat unlikely	47	10%	1	2%	7	9%	
	Very unlikely	90	19%	13	23%	16	22%	
	I don't know	19	4%	2	4%	2	3%	
	Total	467	100%	56	100%	74	100%	
Plant-based choices	Very likely	190	41%	29	52%	26	35%	
that cost the same or	Somewhat likely	127	27%	11	20%	20	27%	
less	Somewhat unlikely	50	11%	1	2%	8	11%	
	Very unlikely	82	18%	13	23%	18	24%	
	I don't know	18	4%	2	4%	2	3%	
	Total	467	100%	56	100%	74	100%	



Institutional Research

Incentives for	Very likely	176	38%	19	34%	13	18%
choosing plant-based	Somewhat likely	113	24%	11	20%	18	24%
meals, like random prizes and/or	Somewhat unlikely	61	13%	5	9%	17	23%
coupons	Very unlikely	85	18%	19	34%	23	31%
	I don't know	32	7%	2	4%	3	4%
	Total	467	100%	56	100%	74	100%
Seeing information	Very likely	134	29%	15	27%	14	19%
about how choosing plant-based meals	Somewhat likely	126	27%	10	18%	21	28%
helps Mesa reach its	Somewhat unlikely	74	16%	5	9%	16	22%
climate goals	Very unlikely	100	21%	24	43%	21	28%
	I don't know	33	7%	2	4%	2	3%
	Total	467	100%	56	100%	74	100%

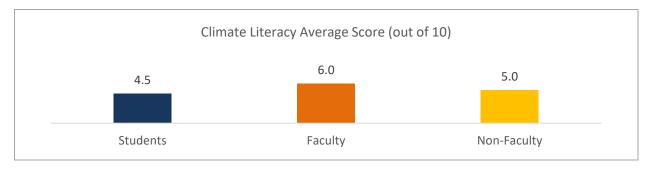
26. Five percent of all buyers of meat-based meals selected "other" as a factor that would lead them to choose plant-based meals on campus and entered a written response. Two themes that emerged tied in first-place. The first one was better quality plant-based options, and the second was not a factor that would shift their behavior, but an expression of their strong preference for meat-based meals. Refer to the Appendix to see a coded list of verbatim responses.



Climate Literacy at Mesa

27. Respondents answered 10 questions to assess their climate literacy. The average (mean) score of faculty respondents was the highest among respondents (6 out of 10), followed by non-faculty (5 out of 10), and students (4.5 out of 10).

Figure 22: Climate Literacy Average Score



28. A climate literacy grade was calculated based on the number of correct responses in the climate literacy assessment. A fifth of student respondents (21%), over a third of faculty respondents (36%), and one third of non-faculty respondents (33%) received a grade of C (70-79%) or better.

Figure 23: Climate Literacy Grade Distribution

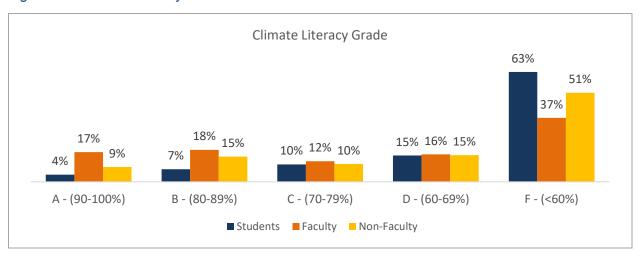




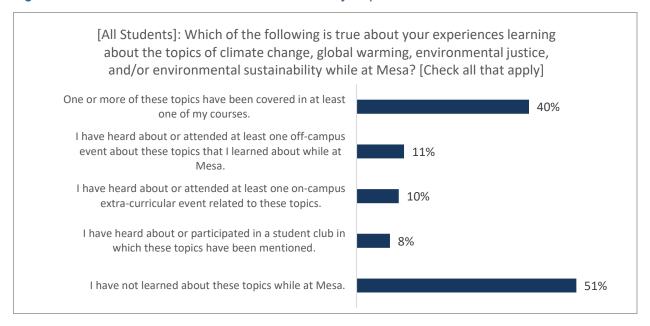
Table 6: Climate Literacy Questions and Correct Responses

Climate Literacy Questions	Students % Correct	Faculty % Correct	Non-Faculty % Correct
What is the greenhouse effect? Correct answer:			
Certain gasses in the atmosphere trap heat and warm			
the Earth	76%	88%	81%
What major biological process results in removing			
carbon from the atmosphere? Correct answer:			
Photosynthesis	56%	77%	56%
Which of the following is NOT a consequence of			
increased concentrations of carbon dioxide in the			
atmosphere? Correct answer: Decreasing sea levels	41%	57%	40%
Which of the following is NOT a greenhouse gas?			
Correct answer: Nitrogen gas (N2)	15%	21%	20%
In San Diego county, which activity is the largest			
source of greenhouse gasses? Correct answer:			
Transportation	50%	66%	59%
Which country has emitted the most carbon dioxide			
(CO2) over time? In other words, which country has			
contributed the largest share of the greenhouse			
gasses that are currently residing in the atmosphere?			
Correct answer: USA	26%	46%	40%
What causes ocean acidification? Correct answer:			
Carbon dioxide (CO2) dissolved in ocean water	48%	56%	44%
Regarding the sources of water for San Diego County			
in 2021, approximately what percent of the water			
used came from "surface water" (rain that falls in San			
Diego or naturally occurs here)? Correct answer: 9%	26%	48%	39%
What is the difference between "weather" and			
"climate?" Correct answer: Weather is a day-to-day			
event while climate is a consistent pattern over many			
years	75%	86%	72%
Which of the following is the definition of sustainable			
development used by the UN Development Program?			
Correct answer: Meeting the needs of the present			
without compromising the ability of future			
generations to meet their own needs	35%	55%	50%
All 10 questions	45%	60%	50%

29. When asked about different ways they learn about the topics of climate change, global warming, environmental justice, and/or environmental sustainability while at Mesa, half of student respondents (51%) reported that they have not learned about these topics while at Mesa. On the other hand, 40% reported that one or more of these topics were covered in at least one of their courses.



Figure 24: How Students Learn About Sustainability Topics at Mesa



30. Student respondents affiliated with the School of Math and Natural Sciences, the School of Social/Behavioral Sciences and Multicultural Studies, and the School of Humanities were more likely to have seen one of the sustainability topics covered in at least one of their courses (50%, 45%, and 45%, respectively).

Table 7: How Students Learn About Sustainability Topics at Mesa by School

Which of the following is true about your experiences learning about the topics of climate change, global warming, environmental justice, and/or environmental sustainability while at Mesa? [Check all that apply]	One or more of these topics have been covered in at least one of my courses.		I have not learned about these topics while at Mesa.	
School	Count	Percent	Count	Percent
Social/Behavioral Sciences/Multicultural	135	45%	147	49%
Learning/Academic Support	14	42%	14	42%
Exercise Sciences/Health Education/Dance/Athletics	24	32%	44	59%
Math/Natural Sciences	180	50%	146	41%
Humanities	27	45%	26	43%
Health Sciences/Public Service	153	40%	191	50%
Business/Technology	156	33%	260	55%
Student Development	<10		10	71%
Student Success/Equity	<10		<10	
Arts/Languages	69	39%	89	51%
Undecided major	41	28%	95	64%
Total	805	40%	1,026	51%

Note. Other ways students might learn about sustainability topics were not disaggregated by school in this table due to low counts.



31. When asked how frequently the topics of environmental sustainability, climate change, global warming, and environmental justice were covered in at least one of their courses, faculty indicated that environmental sustainability was the topic covered more frequently, with half of them (51%) reporting they covered the topic at least briefly. Environmental sustainability was followed by climate change (covered by 47%), global warming (covered by 45%), and environmental justice (covered by 38%).

Figure 25: How Frequent Faculty Covers Sustainability Topics in Their Courses

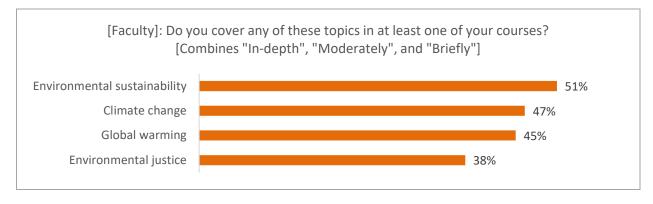


Table 8: How Frequent Faculty Covers Sustainability Topics in Their Courses

Do you cover any one of your cours	of these topics in at least es?	Count	Percent
Climate change	In-depth	13	9%
	Moderately	23	15%
	Briefly	35	23%
	Not at all	81	53%
	Total	152	100%
Global warming	In-depth	13	9%
	Moderately	24	16%
	Briefly	32	21%
	Not at all	83	55%
	Total	152	100%
Environmental	In-depth	7	5%
justice	Moderately	22	14%
	Briefly	29	19%
	Not at all	94	62%
	Total	152	100%
Environmental	In-depth	9	6%
sustainability	Moderately	33	22%
	Briefly	36	24%
	Not at all	74	49%
	Total	152	100%



Appendix

Table 9: "Other" Open-Ended Responses to Question about Factors that Could Shift Respondents to a More Sustainable Mode of Commuting to Mesa

Q11. [Commuters] Please tell us how likely it is that the following would lead you to shift to a more sustainable mode of commuting to Mesa. Other (please specify)	Currently using my best option given my circumstances	Time-efficient public transportation	Improved accessibility	Mesa/SDCCD investments in transportation	Affordable hybrid/ electric vehicles	Remote work opportunities
Taking mass transit would take 4 hours from my house. Buses do not run that early, the						
nearest bus stop is 1/2 mile away but I am disabled and cannot walk that far, and there						
is no, repeat, no parking by the bus stop.	1	1	1			
the reason I can not, unfortunately, shift to public transportation is that I go to work after class at Miramar Rd and it would take me too long to get to work	1	1				
	1	_	1			
I put unlikely because I don't have a bus route that goes from my house to campus. I would only drive. Nothing is better than the freedom my car allows me. I am also	1					
disabled so taking public transportation and having to walk all over campus or finding someone comfortable to study or eat ect would not be suitable for me. I go off campus between classes to Starbucks to study and eat since I can I have my mask off and sit						
inside while eating which I can't not do on campus. I drive a hybrid vehicle.	1		1			
Program for affordable electric cars through the district would help me make the change. Public transportation in San Diego is so terrible. If I used public transportation, I would have to wake up at least 2 hours earlier which is not feasible as I have multiple	1			1	1	
jobs and people to take care of.	1					
A personal vehicle is essential full stop. Gas could be 20\$ a gallon and I will drive. If I could budget an electric car I would go shopping tomorrow.	1				1	
I cannot afford an electric car at this time and charging stations seem few and far between.	1				1	
I need my vehicle, just in case of a medical emergency, and also to run several business on my way home. The opportunity to work from home at least 2 or 3 days out of the week will help environmental sustainability and my finances.	1					1
No pub Transportaion from where I live too far to bike stuck in older gas car transportation- electric cars not priced for students or the average person who spends 65-90% of income towards rent. Get real.	1					
Commuting by car/motorcycle is the only way to reach Mesa from my residence	1					
I drive my gasoline car by myself, it does not matter the heavy traffic	1					
I live pretty far from Mesa so I have to rely on cars for transportation	1					
I'd be more open to shift commuting modes if I didn't live so close to campus.	1					
Most of these options would require me to go severely out of my way to go to school. Driving there myself is the most simple and easy way	1					



Q11. Continued	Currently using my best option given my circumstances	Time-efficient public transportation	Improved accessibility	Mesa/SDCCD investments in transportation	Affordable hybrid/ electric vehicles	Remote work opportunities
I can only afford my car as it is now.	1					
nothing because of covid it's not worth the risk when hardly anyone else is masking	1					
I commute from work so These options would not help me. But if I came from my house						
in SD they would.	1					
Having better modes of public transportation like trains, public buses that leads directly to colleges and more access to bus stops		1	1			
More convenient busses to campus from BLVD63. Most students cannot afford driving every single day.		1	1			
We need better public transport. If San Diego was in Europe, it will take an underground metro about 15 to 20 mins of travel to go from my home to Mesa college. With our current public transport system, it would take about 1hr 40mins to 2hrs. We need more walkable cities and a much better public transport. Our current state is built for cars. I lived in Paris for some time and it was the best metro system I've ever used. There was no incentive to own a car in that city. Metros come and go every 2 mins. The same distance in a metro there, it would take 20mins or less assuming there are no delays.		1	1			
Bus routes that don't take 2 hours to get somewhere that takes 10 minutes by car		1				
Is more like bus routes taking long time More efficient bus/trolley routes. I can't afford the time to spend 45 minutes on public transport when I could drive 15 minutes instead		1				
Alternative transport that doesnt make the commute way longer vs driving aline. Thats my main issue. Time.		1				
It's more due to the fact that if I use the bus/trolley I now have to take account for travel time instead of just hoping I'm my car and going to campus		1				
Public transportation closer than 3 miles to my house.			1			
Disabilities accessible			1			
I would take the trolley if it came to the campus, I would not take the bus.			1			
The Bus to Mesa is insane. Otherwise I would love to ride on the trolley to get to school. I live near a trolley.			1			
Dedicated campus shuttle to high served low income neighborhoods, car sharing vouchers				1		
Mesa shuttle for students living within 5 miles from campus				1		
More secure bike rack locations on campus				1		
Mostly just better bike lanes around campus. The bike lanes currently are dangerous and narrow, with lots of bumps and holes				1		
Shuttle from City College to Mesa College (I live close to City and think students could use it too)				1		



Q11. Continued	Currently using my best option given my circumstances	Time-efficient public transportation	Improved accessibility	Mesa/SDCCD investments in transportation	Affordable hybrid/ electric vehicles	Remote work opportunities
I will need a new car soon. I would like an electric car but there are no charging stations on campus				1		
I dont have an elecctiric car but if I did I would love to use it, I'm currently saving up for one might take 1 year or 2					1	
Prius car.					1	
1 to 1 - Gas for electric car exchange program.					1	
If additional telework were given in exchange to ride public transit I would do it. Random incentives would not be enough. Riding the bus adds a significant amount of time to my commute.						1
More remote work days						1
promote hybrid positions/ working from home						1
Work remotely						1
I would love to shift from a gasoline car to a public transportation if I live closer to Mesa College.						
A safer bus. I would love to take a bus, but I know I speak for a lot of woman when a bus with others doesn't feel safe.						
all ready have free bus pass						
Feeling safe riding the bus or other more sustainable way to get to school during the evening						
Has to be organic culture change, forcing it economically WILL NOT work. Inform students on the facts and be objective and change for the better will follow, it may take longer than you want but it is the ONLY way to instill permanent meaningful change.						
closer affordable housing and work. I should be able to walk to school, work, and everything else in a desirable area from home.						
I think a lot of those ideas are great for students and employees who live closer to campus						
cheaper gas prices						
Cheaper gas prices or Gas gift cards						
Cheaper solar powered vehicle chargers would be great						
Discounted gas for students						
Gas cards giveaways ? Raffles?						
Gas is very expensive						
It will be very nice to get some gas cards to help your self to get at school safe and faster						
lower gas prices.						



Q11. Continued	Currently using my best option given my circumstances	Time-efficient public transportation	Improved accessibility	Mesa/SDCCD investments in transportation	Affordable hybrid/ electric vehicles	Remote work opportunities
I leased electric vehicles for 6 years and hope to return to an electric vehicle in future						
Electric cars are just as bad as gas powered vehicles because of how much making those batteries polutes.						
Electric cars only fix the emissions part of pollution, but electric cars still require lots of steel, glass, and plastic, not to mention 4x the copper of a normal car.						
Grown children who can transport themselves and/or elderly parents who no longer need me.						
Hydrogen Fuel Cell vehicles						
I already commute in an electric vehicle powered by solar						
I already own an electric car						
I have kids						
I suppose your possible answers imply that we are not already doing some of these things ;-)						
I would change to a EV, if I knew the energy was coming from Nuclear power. And if the Ev cobalt for batteries was mined properly. Not by children in Africa.						
if the college would take sustainability seriously and stop forcing students to use masks meaning hundreds of them blown as litter on campus everyday, garbage cans full of the masks which i dont believe are even biodegradable. those things would make me take any of their goals seriously enough to consider change. Thanks						
More parking						
N/A						
Please be honest about "free" items not being free. They are paid for by tax payers.						
Solar panel installed in our townhouse						
Total (n=72)	17	10	10	7	6	5



Table 10: "Other" Open-Ended Responses to Question about Factors that Could Shift On-Campus Single-Use Plastic Bottle Consumers to Reduce Consumption.

Q13. [Commuters & On-Campus Plastic Bottle Consumers] Please tell us how likely it is that the following would lead you to purchase fewer single-use plastic beverage bottles while you are at Mesa. Other (please specify)	Oppose Change	Refill stations	Offering free reusables
Again, trying to force change with these surcharges will produce the opposite affect. It is similar to the			
difference between ridiculing your children when they make a mistake and giving them positive			
reinforcement when they do well.	1		
Charging us does not do anything you will just lose money because people will buy drinks from other			
places	1		
don't make a profit to reach a goal that's not right	1		
Please dont add a surcharge	1		
I carry a Yeti w/me constantly. I don't ask for much but a refillable station the serves cold water that			
informs would be nice.		1	
I purchase a coke at the student center cafe in the morning, and then reuse the bottle with the water			
stations the rest of the day and then recycle it at home. If there were more soda fountains I would not			
need to purchase the drink in a bottle but could use a paper cup or my own container.		1	
The only plastic I used is when purchasing coffee on campus, I would love if the coffee spot on campus			
allowed to bring your own resuable cup.		1	
even having a cute mesa college reusable water bottle offered to purchase when signing up for classes			
would be cool and effective way to encourage reusing bottles over single use plastics			1
The campus cafe needs to hire more dishwashers and stop serving the plastics. Treat it more like a sit			
down mean. And, for the record, they don't take cash. I was going to suggest that they charge \$4			
refundable fee is you use a non-plastic glass for sodas. When you return the glass, you get your \$4 back.			
If you don't return it or throw it away, no \$4 back.			1
I bring water bottles from home so the cost doesn't apply most of the time			
I have a kettle in my office to boil water since my primary beverage of choice is hot tea and I have my			
thermos with me everywhere I go. I don't purchase drinks usually on campus.			
N/A			
Normalize reusing plastic containers by bringing juice or water refilledat home or in old plastic bottles			
before recycling. Spend less on buying new			
Total (n=13)	4	3	2



Table 11: "Other" Open-Ended Responses to Question about Factors that Could Shift Buyers of Meat-Based Meals to Choose Plant-Based Meals on Campus.

Q15. [Commuters & Previous not= e or f] Please tell us how likely it is that the following would lead you to choose plant-based meals rather than meat-based meals while you are at Mesa. Other (please specify)	Better quality plant- based options	Strong preference for meat-based meals	Allergies/ biological insuffiencies
Meat is a compact source of vital nutrients, it tastes good, and provides lasting energy in a form that is easily			
prepared. The amount of human hours involved in trying to make plants remotely resemble meat			
demonstrates meat's superiority. Real advice: If you want people to choose meatless options, it has to be at			
least if not easier, cheaper, and more delicious than meat, as seen by a meat eater, not a 20year vegan with 6			
shelves of spices; Otherwise what incentive to go without meat? To make vegans approve of you? Nope, it is			
marketing and psychology. ^_^	1	1	
Nutrition content. I.e protein high, carb low, calories low. I eat for health and fitness.	1		1
Access to high-quality plant based foods and meals on campus	1		
better testing plant based choices	1		
I don't need more chemicals and processed foods as a result of plant-based diets. Stop trying to force people			
into choices that are not healthy and can negatively impact health!	1		
I would 100% switch to plant based meals if they were proven to be more nutritous than the processed food			
thats made in the cafeteria	1		
More plant based food please!	1		
I am not vegan, vegetarian, pescetarian, etc. Gotta have meat in the food.		1	
I will never eat plant based meat replacements. I actively find ways to avoid doing so. I have only had tofu			
once and never again		1	
I will not choose plant based over animal meat ever.		1	
I'll never stop eating meat		1	
If there's no meat not many people will buy the food. Everyone will run to the In N Out down the street.		1	
Meat > plants		1	
I am not able to eat red meat and soy products			1
I have to be aware of the ingredients in plant based products because of my allergies			1
I would rather pick food that I know will not upset my stomach. I have many food intolerances and "healthier			
options" aren't always the best options for me. Programs never considered people with large food			
sensitivities FODMAPS are found in many fruits and veggies and well meat naturally doesn't have them. I am			
adding her I am a Military Veteran since it was not an option on the last page and is important.			1
My body's metabolism requires meat per my doctor			1
Plant-based choices that don't include nuts			1
changing the hours of food services to be more accessible throughout the schoolday			
I rarely purchase food on campus. Usually bring non-meat-based food with me.			
information regarding the benefits and nutrients of the meal, as well as a list with certain type of health issues			
that people with them would be more encouraged to give it a try.			
Just because something is plant based does not mean it is more sustainable. If the plant based products were			
actually sourced/packaged in a more sustainable way I would choose them. Also, there are ways to ensure			
that the animal products we carry are from sustainable sources.			
Total (n=22)	7	7	6