CSUDH FACULTY AND STAFF HOUSING SURVEY

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS

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ABSTRACT

The South Bay Economics Institute at the College of Business Administration and Public Policy implemented a survey of faculty and staff regarding their current housing situation and potential interest in residing on a campus housing project, among others. Based on 487 survey responses, this report presents respondents' demographic characteristics, specific group characteristics comparison, graphical analysis based on place of residence, estimates of willingness to pay for different rental units on campus, and econometric analysis on the determinants of willingness to pay for a rental unit on campus.

RESEARCH BACKGROUND

Faculty and staff housing issues have been researched in the academic literature specifically in terms of higher education (e.g., Journal *Research in Higher Education* and *Journal of Educational Research*) and campus housing (e.g., *Journal of College and University Student Housing*). This literature covers two important elements: first, the role of housing in the recruitment and retention of faculty (Ambrose, Huston, & Norman, 2005; Blackwell, 1988; Collins, 1990; Davidson, 2012; Lodhi, Raza, & Dilshad, 2013; Weiler, 1985; Miller, Jackson, & Pope, 2001; Wilkinson, 2007); and second, the role that faculty can play in programming around student campus housing (Davidson, 2012; Jessup-Anger, Wawrzynski, & Yao, 2011; Zeller, 2017). Clearly both of these elements play an important role in developing the culture of a campus. This is especially important for an institution such as CSU Dominguez Hills, which has traditionally been a "commuter campus" with relatively limited student housing and significant industrial presence in neighboring zones.

The numerous articles listed above that discuss the role of housing in faculty recruitment and retention highlight the importance of housing concerns among potential and current faculty and staff. If faculty and staff are not able to find a place to live that suits their or their family's desires, then they are less likely to accept the position, or more likely to move to competing institution in subsequent years. This issue might be a particular concern when hiring diverse faculty members (Collins, 1990; Wilkinson, 2007) and in terms of the impact on diverse student bodies (Blackwell, 1988), both of which are primary concerns for CSU Dominguez Hills as a campus.

While some of these academic articles discuss these conceptual issues and unpack the likely causes and consequences of improved faculty and staff housing support by their employers, often the claims are stated rather than being researched empirically. For example, there does not appear to be any research into the factors influencing faculty housing choices, nor whether faculty housing support provided by universities might influence such decisions. This research project aims to make the first steps into this area and gain a deeper understanding of faculty and staff housing choices, the factors influencing them, and the extent to which campus programs could encourage faculty and staff to live closer to campus.

As CSU Dominguez Hills aims to transition from a "commuter campus" into a "destination campus", additional student housing is being built and faculty and staff-involved programming is being considered. This issue has been explored in the *Journal of College and University Student Housing* (see e.g. Davidson, 2012; Jessup-Anger, Wawrzynski, & Yao, 2011; Zeller, 2017). This literature can inform administrators about the type of programming that can promote the development of a campus culture in different respects, ranging from student and faculty experiences, attraction and retention of faculty and staff, and student learning and career outcomes.

There are, however, other areas of the academic literature that can inform this present study, especially in terms of housing choices in general and the "jobs-housing" relationship (Guiliano, 1991). These issues are researched extensively in the areas of urban and regional economics (Benner & Karner, 2016; Brown & Mczyski, 2009; Diamond, 2016; So, Orazem, & Otto, 2001) and transportation studies (Guiliano, 1991; Schleith, Widener, & Kim, 2016; Waddell, Bhat, Eluru, Wang, & Pendyala, 2007; Yang, & Ferreira, 2008; Zhou, Wang, & Schweitzer, 2012). These studies focus on the housing choices made by workers, for which transportation accessibility is a key factor.

Overall, CSU Dominguez Hills is an attractive campus to work at because of its culture and mission, the community it serves, its faculty and staff, its location in Southern California, and its proximity to some of the most important ports and airports in the nation. Providing more quality housing for faculty and staff has the potential to move CSU Dominguez Hills from a commuter campus to a destination campus and continue fulfilling its mission to provide education, research, and service that are, by design, accessible and transformative.

1. INTRODUCTION

The South Bay Economics Institute (SBEI) at the College of Business Administration and Public Policy (CBAPP) at California State University Dominguez Hills (CSUDH) was commissioned to develop and implement a housing survey soliciting information from part-time and full-time staff and faculty, including administrators, regarding their current housing situation, potential interest in residing on a campus housing project, residential amenities they value, cost considerations, and other important factors regarding housing.

In particular, this housing survey sought to assess the current and future housing needs of CSUDH faculty and staff and the level of interest by CSUDH faculty and staff in living in the oncampus housing project proposed in the University Village development plan—which is part of the University's efforts to develop effective long-range plans—and formulate policies and recommendations that better meet the needs of the CSUDH community.

The SBEI was to identify a target population, design and develop the survey instrument, apply the survey to the target population, collect data derived from survey responses, and prepare a report analyzing the main results. In addition, the report was to include an analysis of current rental market conditions around all CSU campuses and a brief summary of different faculty-staff housing projects at other CSU campuses and some UC campuses in the area.

Dr. Jose N. Martinez and Dr. Fynnwin Prager, co-directors of the SBEI, were to manage the design and implementation of the survey, the data collection process, and the production of a final report analyzing the main findings from the survey. Dr. Martinez and Dr. Prager were assisted by Dr. Sherine El Hag, a full-time Economics lecturer in the Accounting, Finance, Economics & Law department at CBAPP, and together oversaw the participation of SBEI student research assistants Malak Elokour, Miguel Pulido, and Randi Correa.

On February 13th, and on behalf of VP, Administration and Finance, Naomi Goodwin and Provost and VP, Academic Affairs, Dr. Michael Spagna, an email with a link to the housing survey went out to 1,895 recipients inviting the CSUDH community to participate in the faculty and staff housing survey. As stated in the email, all survey responses were confidential, as confirmed by Mr. Kerry Boyer, CSUDH Information Security Officer, and the link to the survey was to remain active until March 1st, 2019. Based on data collected soon after the deadline, there were 487 completed responses[1]. This response rate represents a 26 percent participation rate overall. For some specific targeted groups, the estimated participation rates varied significantly for part-time and full-time staff and faculty[2].

[1] As expected, there was a range of survey responses' completion. Some participants responded only to a few questions, but the vast majority of participants answered all questions.

[2] Actual participation rates for the target groups might vary from estimates due to attrition.

SOME OF MAIN RESULTS FROM THE SURVEY ARE PRESENTED HERE:

Demographic characteristics

Most survey respondents were full-time staff, married, and female. The weighted-average respondent is around 45 years of age, has been employed at CSUDH for around 8 years, lives about 17 miles from campus, takes 37 minutes to drive to work and 40 minutes to drive back home, thinks owning a home is important, lives in a single family home (detached) or an apartment, spends around 31 percent of their gross family income in housing, is unlikely to have plans to move out of the county they live in, and is satisfied with her current home.

Comparing full-time staff, part-time faculty, and full-time faculty

Full-time staff are more likely to be female, have more years of employment at CSUDH, and be significantly younger than part-time and full-time faculty. Travel time to and from work for full-time staff is the shortest, which corresponds also to the shortest commute distance from home to CSUDH. Fulltime staff tend to prefer a 1 bedroom apartment, while part-time and full-time faculty prefer 2 bedroom and 3 bedroom apartments, respectively. Full-time staff have the lowest levels of satisfaction with their current housing and the highest rates in regards to plans to move.

Among full-time faculty

Those with rank of Assistant Professor and Lecturer have the shortest commutes to work and tend to live closer to CSUDH. The former also have the highest probability of renting, while those with rank of Professor have the highest gross family income and monthly housing expenses. The highest levels of satisfaction with current housing is for those with rank of Professors, but Assistant Professors have the highest rates for plans to move.

Place of residence

The majority of respondents live within 20 miles from campus, but the densest clusters of housing location are in the immediate vicinity of campus, and less than 10 percent of respondents live within 5 miles from CSUDH. Full-time faculty members tend to live closer to the coast, which might reflect their higher average salaries. Full-time staff members tend to live closer to campus, which might reflect their less flexible schedule. Part-time faculty members tend to live farther from campus than other employees. Among renters, close to 50 percent of respondents have plans to move in the next 2 years.

Willingness to pay for on campus housing

The Van Westendorp Price Sensitivity Meter technique is used to estimate that respondents tend to prefer 2 and 3 bedroom apartments and are willing to pay between $1,650 and $1,750 for a 2 bedroom apartment and between $1,900 and $2,000 for a 3 bedroom apartment on campus. Econometric analysis of survey responses indicates that being female, having elders in the household, being the householder or spouse of householder, housing expenses, and family income are the main determinants of willingness to pay for housing on campus, and they all are positively correlated with willingness to pay for rental apartments on campus.

2. TABLE OF CONTENTS

THE FOLLOWING REPRESENTS A TABLE OF CONTENTS FOR THE REMAINDER OF THIS REPORT:

3. SURVEY RESPONSES SUMMARY STATISTICS

This section summarizes the majority of survey responses based on 487 completed surveys. The survey was composed of 34 questions, 30 of them were applied to all participants and 4 were conditional on participants' responses[3]. Some questions were closed-ended, some were rating scale, and some were rank-order questions. Altogether, these demographic variables describe participants' gender, age, marital status, household characteristics, place of residence, employment at CSUDH, transportation to and from work, and housing ownership, expenditures, type, preferences, willingness to pay, and satisfaction.

Table 1 presents summary statistics for survey responses. The great majority of respondents are female and the estimated weighted average age is 45.5 years of age[4]. In terms of marital status, 58 percent of respondents are married and 27 percent have never been married, and the average household size is 2.7 individuals.

Table 1. Summary Statistics

	Percentage	Responses
Gender		480
Female	65.0	
Male	33.8	
Non-binary	1.3	
Age		478
18-24	1.7	
25-34	19.5	
35-44	27.2	
45-54	26.4	
55-64	19.7	
65+	5.7	
Marital Status		478
Married	58.0	
Widowed	0.6	
Divorced	12.6	
Separated	1.7	
Never married	27.2	

[3] The survey questionnaire is included in the appendix as Table A1.

[4] Weighted averages calculations assume equal probability within categories, and this applies to all category answers of this type.

The survey also asks respondents how many household members, including themselves, belong to different age categories. Around 34 percent of respondents have at least one minor (younger than 18 years of age) in the household, around 13 percent have at least one elder (65 years and older), and the weighted average years of employment at CSUDH is 8.41 years.

Table 1. Summary Statistics (continued)

				Responses
Household Size		Mean	Std Dev	478
		2.7	1.4	
Household Relation				477
Householder or spouse of householder	84.3			
Relative of householder (son, daughter,...)	9.9			
Relative of householder (other relative)	1.5			
Non-relative of householder	4.4			
Years Employed at DH				479
Less than 1 year	14.2			
1-2 years	14.4			
3-4 years	15.5			
5-6 years	12.9			
7-8 years	4.4			
9-10 years	5.0			
11-15 years	14.4			
16-20 years	8.8			
More than 20 years	10.4			

The majority of survey respondents are full-time staff, which is no surprise given that the majority of full time employees at CSUDH belong to this category. Almost 30 percent of respondents were full-time faculty, and for this particular group, tenured faculty represents around 48 percent, and the largest group is Assistant Professors, followed by Professors, Associate Professors, and Lecturers[5].

The main mode of transportation to work is by car, truck, or van (drive alone), which accounts for almost 90 percent. Only 6 percent of respondents carpool and 2.5 percent use public transportation to come to work. Around 14.5 percent of respondents who arrive to CSUDH by car, truck, or van (drive alone or carpool), claim to have an efficient vehicle that qualifies them for carpool lane access[6]. To put these numbers in perspective, the American Community Survey in 2016 found that around 83 percent of workers in Los Angeles County drive alone to work, around 12 percent carpool, and around 7 percent use public transportation. Furthermore, a 2016 survey by UCLA shows that 53 percent of employees drive to work alone, 12 percent carpool, and around 17 percent use public transportation.

[5] The relative size of the Assistant Professors' group reflects the recent post-recession faculty hiring boom at CSUDH.

[6] We believe some of the affirmative responses might have been referring to having access to carpool lanes due to the number of occupants in the vehicle and not necessarily to owning a low or zero emissions vehicle.

Table 1. Summary Statistics (continued)		
		Responses
Position at DH		480
Part-Time Staff	2.7	
Full-Time Staff	52.5	
Part-Time Faculty	15.4	
Full-Time Faculty	29.4	
Academic Title (Full Time Faculty)		140
Lecturer	15.7	
Assistant Prof	36.4	
Associate Prof	16.4	
Professor	31.4	
Main Transportation Mode to Work		481
Car-alone	89.8	
Car-carpool	6.0	
Public	2.5	
Plane	0.2	
Motorcycle	0.2	
Bicycle	0.6	
Walk	0.6	
Efficient Vehicle for Carpool Lane?		462
Yes	14.5	
No	85.5	

Considering that the vast majority of respondents travel to work by themselves, the weighted average travel time to work is around 37 minutes. This number is significantly higher than the average travel time in Los Angeles County (around 30 minutes), the South Bay region (around 29 minutes), and the nation (around 26 minutes)[7]. Also, around 14 percent of respondents drive 1 hour or more to come to work at CSUDH, but more than 17 percent drive 1 hour or more to go back home. The survey does not ask about typical arrival time on campus, but we suspect that the majority of respondents arrive early in the morning and leave in the afternoon and early evening hours. Accordingly, the estimated travel time from work to home is slightly longer (around 40 minutes). Travel times to work and home are somewhat reasonable given that the weighted average distance traveled from home to work is around 17 miles.

[7] Estimates come from the 2016 American Community Survey.

Table 1. Summary Statistics (continued)		
		Responses
Travel Time to Work (minutes)		481
< 5	1.7	
5-9	2.1	
10-14	5.0	
15-19	9.2	
20-24	10.2	
25-29	13.9	
30-34	14.4	
35-39	9.4	
40-44	7.7	
45-59	12.7	
60-89	10.4	
90+	3.5	
Travel Time to Home (minutes)		478
< 5	1.67	
5-9	1.88	
10-14	2.93	
15-19	7.53	
20-24	8.58	
25-29	11.72	
30-34	15.06	
35-39	7.95	
40-44	10.67	
45-59	14.85	
60-89	12.55	
90+	4.60	
Distance Home to DH (miles)		478
0-2	2.92	
3-5	6.04	
6-10	24.38	
11-15	26.25	
16-20	15.42	
21-30	12.08	
31-40	6.67	
41-50	2.92	
50+	3.33	

In addition to the estimated distance from home to CSUDH, this survey also asks respondents for their specific city of residence and zip code. **Figure 1** plots the geographic spread of housing locations for all CSUDH employees responding to the survey, without considering density. Figure 1 highlights that the majority of respondents live within 20 miles of campus, as the crow flies. Descriptive statistics in Table 1 suggest this figure is 75 percent of respondents. That said, a number of faculty live much further afield. Figure 1 presents a map of Southern California only, with some employees living as far away as Thousand Oaks to the northeast, San Diego to the south, Apple Valley to the northwest, and Hemet to the west. That said, other employees live out of state.

Figure 2 focuses on the density of employee housing locations within the counties of Los Angeles, Orange and Riverside. This map highlights the result in Table 1 that 60 percent of employees live within 15 miles of campus. The densest clusters of housing locations are in the immediate vicinity of campus, such as Long Beach, the peninsula, Carson, Torrance, Redondo Beach, Gardena, and Inglewood.

Figure 3 presents housing locations of CSUDH employees by position, with full-time faculty represented in red, full-time staff represented in yellow, part-time faculty represented in green, and part-time staff represented in blue. While employees of each category live across the region, general clusters are noticeable. First, full-time faculty tend to live closer to the coast than other employees. This probably reflects their higher average wages and hence ability to afford housing in higher-priced coastal locations. Full-time faculty are also spread along the coast, mostly from Long Beach up to Santa Monica (some 20 miles to the northeast of campus), though with some in Costa Mesa (some 20 miles to the southwest of campus). In addition to affordability, these housing location choices

likely reflect full-time faculty's flexible schedules, which allow them to work from home more often. Indeed, studies in the "telecommuting" literature (e.g. Zhu and Mason, 2014) have found that workers with the ability to telecommute tend to live further from their workplace. In contrast, full-time staff, who tend not to have the same flexibility, tend to live closer to campus, and less often near the coast. While part-time staff are too small a sample size to discuss reliably, part-time faculty are more likely to live further from campus, including a number in Orange County, Downtown LA, and the San Fernando Valley. Those within this group might be employed at other organizations –whether in higher education or otherwise – and hence base their housing choices on a more complex set of factors.

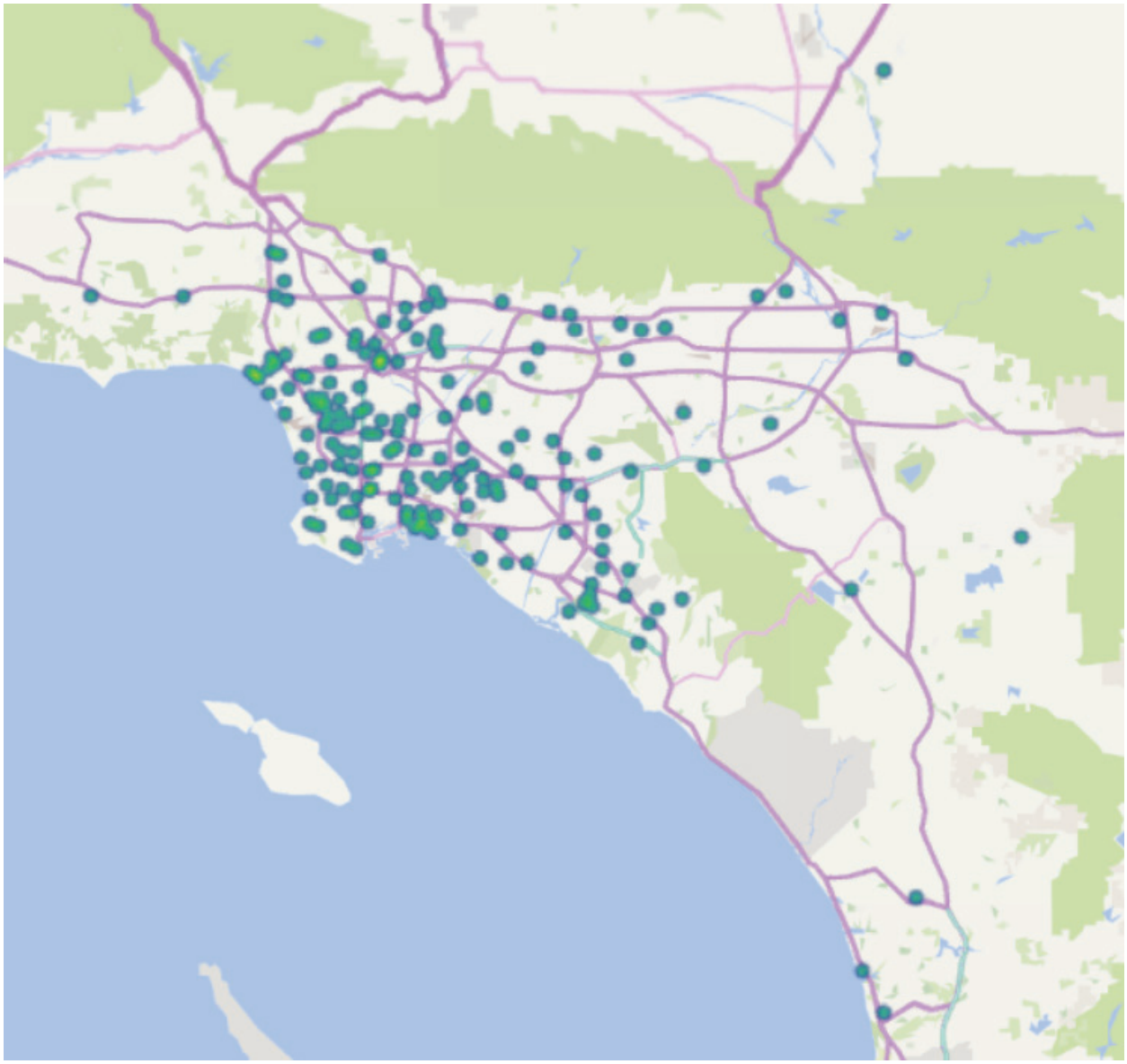

Figure 1. Geographic spread of all CSUDH employee housing locations.

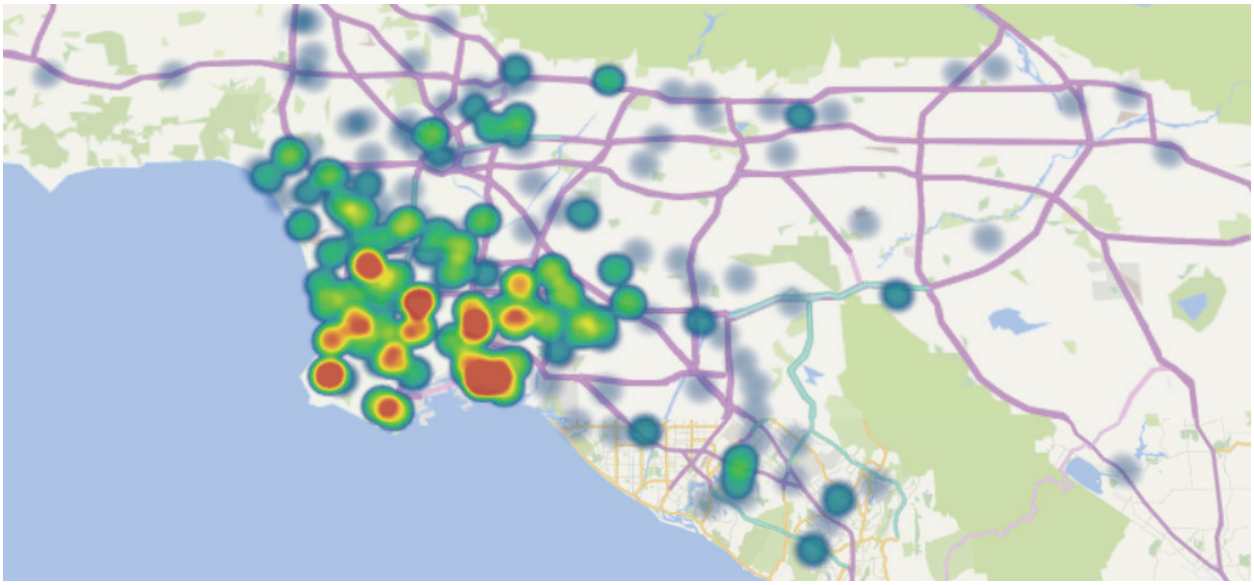

Figure 2. Density of all CSUDH employee housing locations.

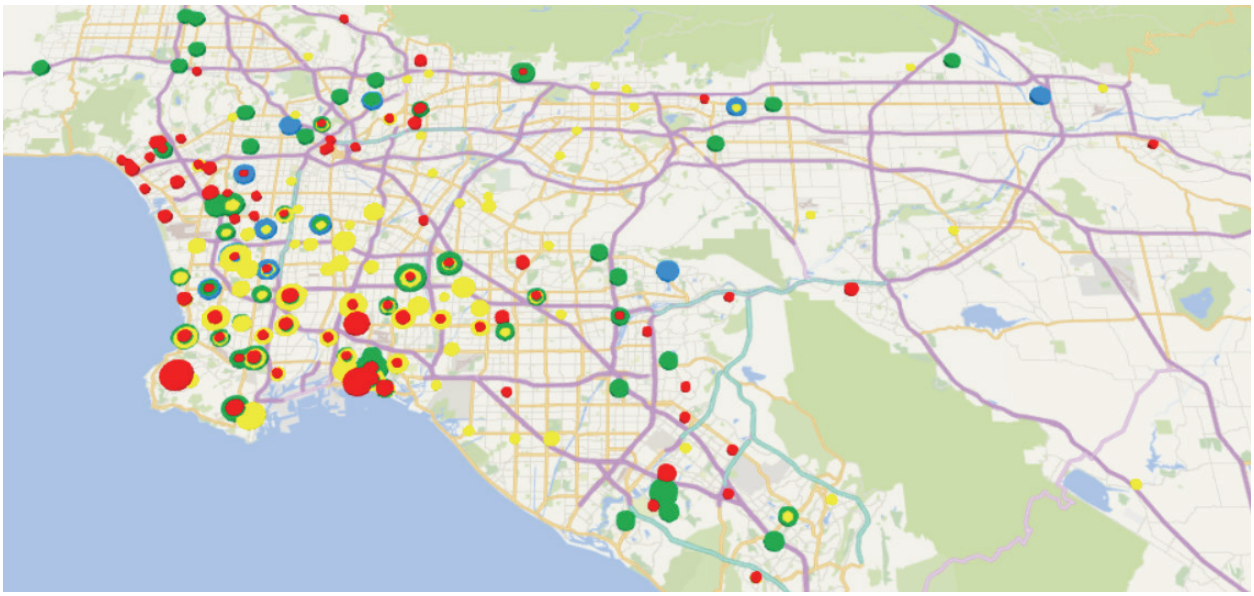

Figure 3. CSUDH Employee housing locations by position.

= Full-time faculty = Full-time staff = Part-time faculty = Part-time staff

Out of the 478 responses to the question of housing distance from CSUDH, less than 10 percent live within 5 miles from campus. For those living 5 or more miles from campus, this survey asked for the 3 main reasons not to live closer to campus[8]. The 3 main responses were for less than desired quality of housing near campus, location amenities less than desired near campus, and higher housing prices near campus. For the "Other" category, responses vary significantly, from people responding that they previously owned a home on or near campus, they love where they live now, prefer to live close to the beach, wages are too low near campus, there are few restaurants around campus, etc[9].

[8] Percentages do not add to 100, given that respondents were allowed to provide more than 1 answer.

[9] The actual responses for the "Other" category for this question can be found in the appendix as Table A2.

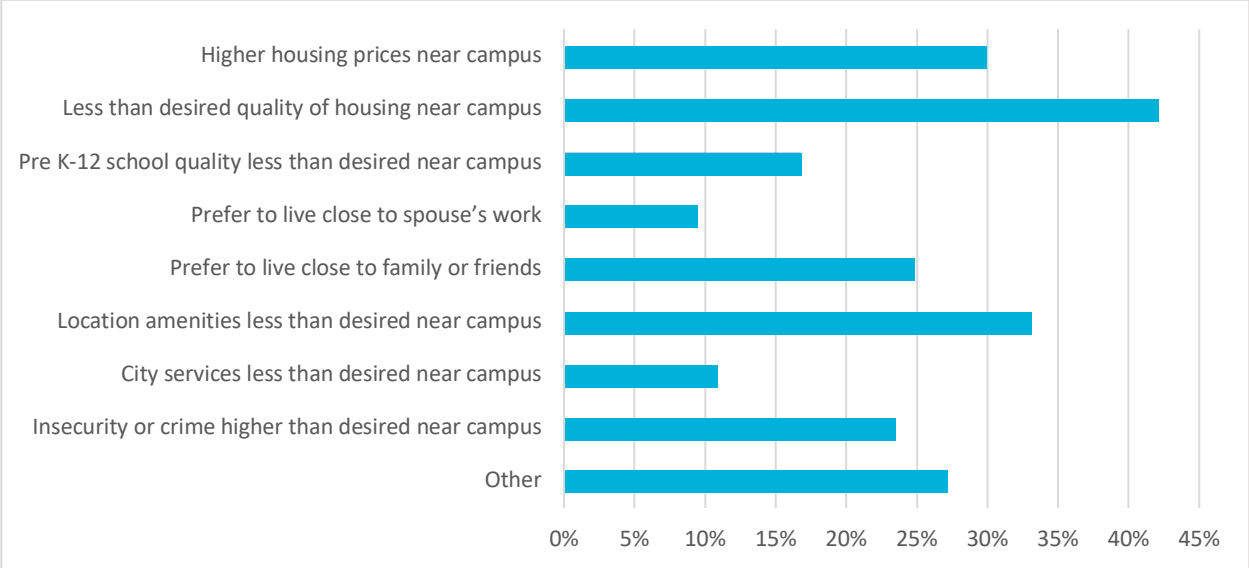

Figure 4. Main reasons not to live closer to campus (for those living 5+ miles from campus, n=435).

More than 81 percent of respondents state that owning a home is important or very important, and a little bit more than 50 percent of respondents currently rent. In terms of monthly housing expenses, the overall weighted average is about $2,186. Among renters, the estimated monthly housing expenses are around $1,936. On average, respondents spend around 31 percent of their monthly family gross income in rent or mortgage. Rent burden is typically defined as spending more than 30 percent of household income on housing, so the average respondent fits this category. Among renters, respondents spend around 33 percent of their monthly family gross income in rent, around 55 percent of respondents are considered rent-burdened, and around 13 percent spend more than 50 percent of their household income in rent. In terms of estimated total gross family income, the weighted average for all respondents is around $111,000, which is substantially above the $61,015 reported for Los Angeles County by the U.S. Census Bureau.

Table 1. Summary Statistics (continued)

		Responses
Owning a Home Importance		434
Very Important	60.1	
Important	21.2	
Somewhat Important	13.4	
Somewhat Unimportant	3.2	
Unimportant	1.4	
Very Unimportant	0.7	
Current Home Ownership		431
Own	5.3	
Own (mortgage)	42.0	
Rent	50.6	
No Cash Rent	2.1	
Monthly Housing Expenses		429
0-0.5K	5.6	
0.5-1K	6.1	
1-1.5K	12.4	
1.5-2K	24.7	
2-2.5K	18.7	
2.5-3K	15.6	
3-3.5K	6.3	
3.5-4K	4.4	
4-4.5K	2.1	
4.5-5K	1.6	
5K+	2.6	

		Responses
Housing Expenses as % of Income		425
<10	8.0	
10-14.9	7.5	
15-19.9	7.5	
20-24.9	12.7	
25-29.9	14.4	
30-34.9	14.4	
35-39.9	10.6	
40-49.9	11.5	
50+	13.4	
Annual Gross Family Income		427
<35K	2.8	
<35-50K	10.3	
<50-75K	16.6	
<75-100K	23.7	
<100-150K	25.5	
<150-200K	12.2	
<200K+	8.9	

Single family home-detached and apartments are the most common responses for the type of housing currently occupied. Respondents were also asked, if they were to move to a rental unit near campus, which type of rental unit would best fit their family housing needs. Overall, respondents prefer larger units and a small percentage would prefer a studio or a 1 bedroom apartment rental. The survey also asks about the short-term (0-2 years) and long-term (2+ years) moving plans. Around 60 and 40 percent of respondents do not have plans to move and around 7 and 21 percent plan to move to another county or out of state in the short-term and long-term, respectively. For people that plan to move but remain in the county, the rates are around 34 and 39 percent for short-term and long-term, respectively.

Considering only the people who rent, the percentages for planning to move but remain in the county are around 48 percent and 49 percent for short-term and long-term, respectively. Finally, around 31 percent of respondents are very satisfied with their current home and around 42 percent are satisfied. Among renters, only around 13 percent are very satisfied and around 45 percent are satisfied.

Table 1. Summary Statistics (continued)

		Responses
Current Home Type		434
Single Family Home-Detached	44.7	
Single Family Home-Attached	6.2	
Apartment	29.0	
Condo	10.4	
Townhouse	7.8	
Manufacturing	0.5	
Other	1.4	
Housing Choice at DH		434
Studio	2.1	
1-bdr	15.4	
2-bdr	40.6	
3-bdr	41.9	
Moving Plans Within 2 Years		432
Not planning to move	59.7	
Moving within same city	16.2	
Another city within same county	17.6	
Moving to another county	4.4	
Moving out of state	2.1	

		Responses
Moving Plans More Than 2 Years		433
Not planning to move	40.0	
Moving within same city	14.1	
Another city within same county	25.2	
Moving to another county	9.2	
Moving out of state	9.2	
Moving out of the country	2.3	
Current Housing Satisfaction		434
Very Satisfied	31.1	
Satisfied	41.7	
Neither	15.9	
Dissatisfied	8.5	
Very dissatisfied	2.8	

For the 27 percent of respondents who state not being satisfied with their current home, this survey also asks for the 3 main reasons not being satisfied with their current home. The most common responses are inadequate size, too expensive, and other. Living too far from work and high insecurity and crime were also popular responses. Among the "Other" category, responses also varied significantly from parking issues, problems with the landlord, and the overall quality of their housing[10]. These responses paint a picture of a staff and faculty population's section that might not be happy with their current housing conditions mainly due to affordability issues that force them to live far from campus and/or in inadequate places.

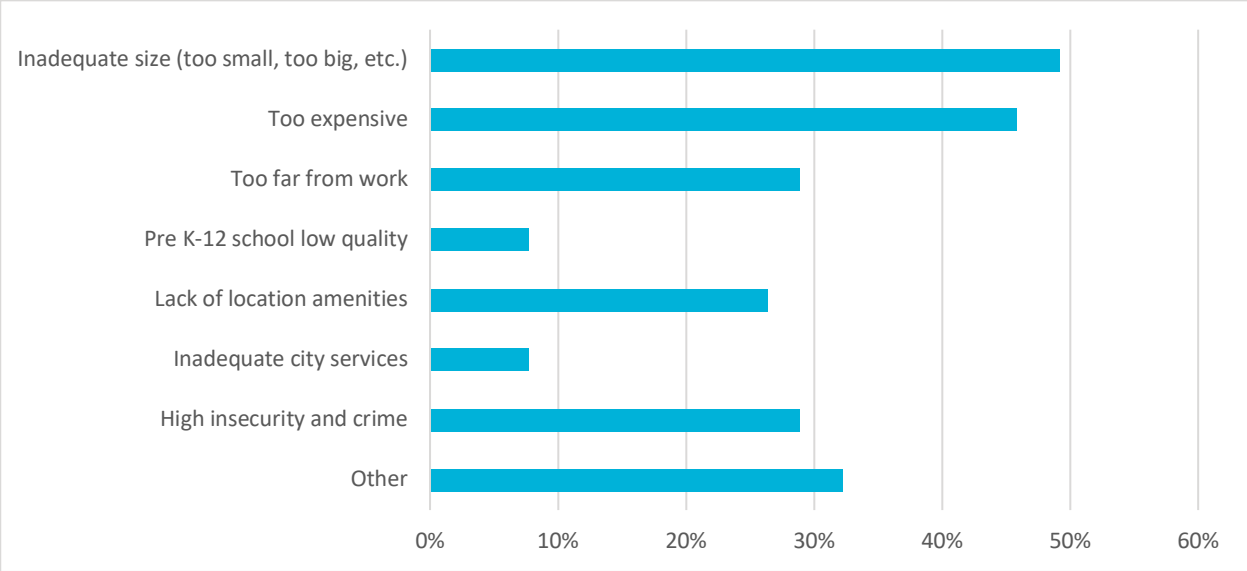

Figure 5. Main reasons not to be satisfied with current housing.

Respondents' willingness to pay for housing on campus will be analyzed in the following sections. After collecting data on respondents' willingness to pay for housing on campus, this survey also asks for their input on the 3 most important amenities that a housing project on campus should have. 422 provided all 3 answers, 14 provided 2 answers, 3 provided only 1 answer, and 55 respondents provided no answers. Out of 439 responses, the most common responses are secured access, groceries store, and well-maintained common areas. Covered parking, pet friendly facilities, and fitness and wellness center are also relatively important.

Comparing the overall responses to the responses from new hires and those who rent apartments of attached housing units, all groups share the same 6 top amenities. Furthermore, secured access and groceries store are the two main amenities for all groups. One of the small differences is that new hires prefer more pet friendly facilities and less well-maintained common areas, while those who rent prefer more covered parking and less well-maintained common areas.

[10] The complete list of responses for the "Other" category for this question are listed in the appendix as Table A3.

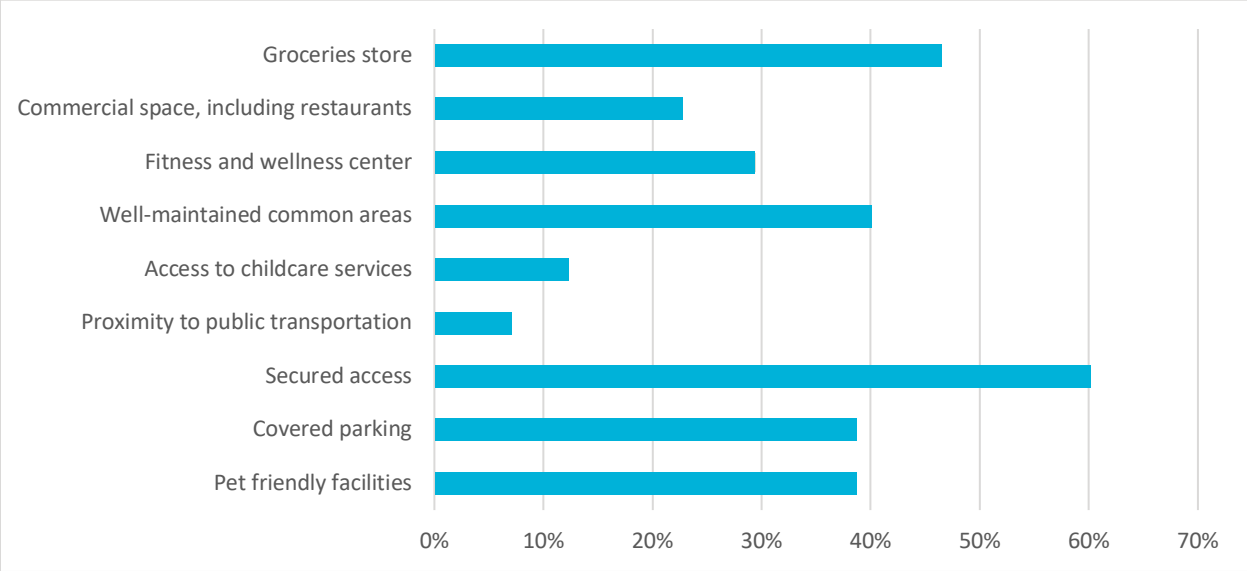

Figure 6. Main amenities for a housing project on campus (n=439).

4. CROSSTAB ANALYSIS

This section focuses on the survey responses for some important population groups identified in the survey. According to Table 2, the 3 main groups among respondents are full time staff, part time faculty, and full time faculty. Considering that housing decisions and willingness to pay for housing might be also influenced by years of employment at CSUDH and academic title, this section compares the responses for different academic groups.

Table 2 presents the summary statistics for full-time staff (1), part-time faculty (2), and full-time faculty (3). Columns in between measure the statistical significance of t-test results that compare the means between specific groups. The tested hypothesis is that the means are the same for both groups. The last column (ANOVA) represents the statistical significance of the f-test results that compare the means for all groups. Here, the tested hypothesis is that the means for all groups are the same.

Considering mainly statistically significant differences, full-time staff are more likely to be female and younger than part-time and full-time faculty. On the other hand, full-time faculty are more likely to be married and live in smaller households than full-time staff.

In terms of years of employment, full-time staff have worked longer at CSUDH and take less time to drive to work than part-time faculty, which is the group that takes the longest to drive to work. This is partly explained by the fact that part-time faculty live farthest from campus, followed by full-time faculty and full-time staff.

Full-time staff are more likely to choose a 1 bedroom apartment than part-time and full-time faculty, but they also have the largest household size. Part-time faculty are more likely to choose a 2 bedroom apartment and full-time faculty are more likely to choose a 3 bedroom apartment. Accordingly, full-time staff have the lowest willingness to pay for a rental unit on campus, followed by part-time faculty and full-time faculty.

Table 2. Summary Statistics by Position							
	(1)	Diff (1),(2)	(2)	Diff (2),(3)	(3)	Diff (1),(3)	ANOVA
	Full-Time Staff		**Part-Time Faculty**		**Full-Time Faculty**		
N	252		74		141		
Female	0.694	**	0.541		0.610	*	
	(0.694)		(0.540)		(0.609)		
Age	43.22	***	49.22		47.63	***	
	(11.83)		(12.40)		(11.32)		
Married	0.536		0.608		0.645	**	
	(0.499)		(0.491)		(0.480)		
Household Size	2.863		2.554		2.504	**	
	(1.458)		(1.335)		(1.274)		
Years Employed DH	9.149	**	6.973		8.422		
	(8.221)		(6.980)		(7.313)		
Travel Time To Work	35.07	*	39.61		36.83		
	(20.20)		(22.58)		(20.07)		
Distance to DH	15.03	***	21.47		19.08	***	
	(12.04)		(15.15)		(13.69)		
Important Owning Home	0.532		0.581		0.539		
	(0.499)		(0.496)		(0.500)		
Renting	0.572		0.409		0.438		
	(0.495)		(0.495)		(0.498)		
1 Bedroom Apt	0.171		0.095		0.106	*	***
	(0.376)		(0.294)		(0.309)		
2 Bedroom Apt	0.361		0.392		0.383		
	(0.481)		(0.491)		(0.487)		
3 Bedroom Apt	0.337		0.378		0.426	*	
	(0.473)		(0.488)		(0.496)		
Willingness To Pay	1,649.40	**	1,810.66		1,872.95	***	
	(554.3)		(508.7)		(622.8)		
Monthly Housing Expenses	2,056.55		2,088.77	**	2,487.07	***	
	(1,124.0)		(1,160.0)		(1,099.1)		
Gross Family Income	98,492.50	*	112,355.00	***	135,485.80	***	***
	(55,084.5)		(62,678.6)		(55,303.6)		
Not Moving (LR)	0.302		0.365		0.447	***	
	(0.459)		(0.484)		(0.498)		
Very Satisfied With Housing	0.262		0.297		0.305		
	(0.440)		(0.460)		(0.462)		

Standard of deviation in parentheses, * p<0.10, ** p<0.05, *** p<0.01.

Full-time faculty have the highest annual gross family income, and they also spend the most on housing. In terms of plans to move in the long run, full-time faculty have the lowest rate, followed by part-time faculty and full-time staff. Finally, there are no statistical differences in terms of the groups' level of satisfaction with their current homes, but full-time staff have the lowest rate.

Considering only full-time faculty, the following table compares some of the main results for lecturers, assistant professors, associate professors, and professors at CSUDH. The results show that age is significantly different for all groups. Among tenured and tenure-track professors, the weighted average age follows the academic rankings, as expected. Lecturers, on the other hand, tend to be older than assistant professors and about as old as associate professors. Lecturers are also less likely to be married than any of the other groups.

Given the natural progression in academic title, full professors have the longest tenure at CSUDH, followed by associate and assistant professors. Lecturers have been employed at CSUDH for an average of around 7 years.

Owning a home is important for all academic groups, but associate professors have the highest rate. This rate is only below 50 percent for assistant professors, and lecturers have a similar rate than full professors. Assistant professor have by far the largest rental rate, which is more than twice the rate of any other group.

In terms of their choice for housing on campus, lecturers tend to prefer 1 bedroom apartment more than any other group, but this group also has the largest household size. For 2 bedroom apartments, assistant and associate professors have the highest preferences, followed by full professors and lecturers. Full professor have the largest preference rate for 3 bedroom apartments, but the differences with other groups are not statistically significant. Similarly, associate professor have the largest willingness to pay for a rental unit on campus, followed by full professors, assistant professors, and lecturers, but the differences with other groups are not statistically significant.

For family annual gross family income and monthly housing expenses, full professors have the largest figures, followed by associate and assistant professors. Lecturers have similar figures than associate professor in terms of annual gross family income and monthly housing expenses.

Finally, lecturers have fewer plans to move and are more satisfied with their current home than assistant professors, but associate professor have fewer plans not to move and higher satisfaction levels than lecturers. Full professors have the largest satisfaction levels and the lowest plans to move than any other group.

Table 3. Summary Statistics by Academic Title								
	(1)	Diff (1),(2)	(2)	Diff (2),(3)	(3)	Diff (3),(4)		ANOVA
	Lecturer		**Assistant Prof**		**Associate Prof**		**Professor**	
n	22		51		21		44	
Female	0.818		0.686		0.609		0.409	
	(0.394)		(0.468)		(0.499)		(0.497)	
Age	49.95	***	38.94	***	49.5	***	55.86	*
	(11.86)		(7.70)		(8.16)		(8.55)	
Married	0.455	*	0.686		0.609		0.705	
	(0.509)		(0.468)		(0.499)		(0.461)	
Household Size	2.727		2.314		2.435		2.591	
	(1.548)		(1.157)		(1.236)		(1.244)	
Years Employed DH	7.251	***	2.745	***	9.564	***	15.102	**
	(6.830)		(2.540)		(5.531)		(6.380)	
Travel Time To Work	33.86		36.22		40.77		37.05	
	(14.51)		(18.54)		(25.58)		(20.70)	
Distance to DH	17.63		17.36		21.75		19.35	
	(9.200)		(12.09)		(19.15)		(11.77)	
Important Owning Home	0.591		0.431	*	0.652		0.591	
	(0.503)		(0.500)		(0.486)		(0.497)	
Renting	0.300	***	0.708	***	0.333		0.244	
	(0.470)		(0.459)		(0.483)		(0.434)	
1 Bedroom Apt	0.182		0.157		0.043		0.045	***
	(0.394)		(0.367)		(0.208)		(0.210)	
2 Bedroom Apt	0.273		0.431		0.435		0.364	
	(0.455)		(0.500)		(0.506)		(0.486)	
3 Bedroom Apt	0.409		0.353		0.435		0.523	
	(0.503)		(0.482)		(0.506)		(0.505)	
Willingness To Pay	1,673.80		1,851.37		1,922.65		1,910.48	
	(647.0)		(518.2)		(615.3)		(672.9)	
Monthly Housing Expenses	2,473.50		2,312.67		2,368.90		2,744.17	***
	(1,475.4)		(600.6)		(754.3)		(1,385.6)	
Gross Family Income	130,925		117,031		135,625	**	159,687.50	
	(55,220)		(51,534)		(54,525)		(50,812)	
Not Moving (LR)	0.591	***	0.216	**	0.478		0.636	
	(0.503)		(0.415)		(0.510)		(0.486)	
Very Satisfied With Housing	0.273		0.196	*	0.391		0.409	
	(0.455)		(0.400)		(0.499)		(0.497)	

Standard of deviation in parentheses, * p<0.10, ** p<0.05, *** p<0.01.

5. WILLINGNESS TO PAY AND THE PRICE SENSITIVITY METER

One of the main goals of this survey is to assess the respondents' level of interest and willingness to pay for a rental unit in a housing project for faculty and staff on campus. Respondents were asked about the housing type that would best fit their family housing needs, were they to move to a rental unit on campus. Most respondents preferred a 2 and 3 bedroom apartment and few chose a studio or a 1 bedroom apartment. Based on their choices, respondents were asked a series of questions to assess, directly and indirectly, their willingness to pay for a rental unit based on their housing type they chose. To assess directly the respondents' willingness to pay, the survey asks explicitly for their willingness to pay for a housing rental unit on campus, while giving them some information about average rental rates for similar size units around campus[11].

Van Westendorp's Price Sensitivity Meter (PSM) is a marketing analysis technique that tries to assess respondents' willingness to pay, and consequently the value they assign, for a product by asking them a series of questions about what prices they consider too expensive, too cheap, somewhat expensive, and a bargain[12]. One of the assumptions of this technique is that respondents have a clear measure of value for a particular good. In the context of this survey, respondents are assumed to have a clear idea of the value of a rental unit on campus, but in reality they might lack specific information about the size and quality of rental units, condition, services included, housing project's amenities, quality of schools around housing project, etc. Furthermore, the respondents might not be aware of prices for truly "comparable" rental units around campus that would allow them to assess better the value of a similar rental unit on campus. For these particular reasons, we recommend taking the estimates from this section with caution.

Once respondents have established their preference of rental unit type, they are prompted to choose a price at which they would consider the rental unit to start getting "too expensive" for them to rent. Then, the survey asks for a price at which they would consider the rental unit to start getting "too cheap", so that they will start question its quality. Following, respondents are prompted for a price at which they would consider the rental unit to start getting "expensive", so that it's not completely out of question, but they must think more about renting it. Finally, the survey asks for a price at which they would start considering it a great value, a "bargain".

Once all responses are recorded, 4 different curves are generated and graphed using the cumulative percentages (y-axis) for different price categories (x-axis). Each point in the graph corresponds to a specific price category and the corresponding cumulative percentage of responses for such price. According to the PSM, the corresponding price for the intersection between the "too expensive" and the "too cheap" curves represents the point of "marginal cheapness". At this point, the cumulative percentage of respondents for both categories is the same. Also, choosing a lower price would result in more people considering it to be "too cheap" than "too expensive". On the other hand, the corresponding price for the intersection between the "bargain" and the "expensive" curve represents the point of "marginal expensiveness". Choosing a higher price would result in more people considering it to be expensive than a bargain.

[11] This particular question asks: Around campus, the average monthly rental rate is $1,195 for a studio, $1,531 for a 1 bedroom apartment, $1,850 for a 2 bedroom apartment, and $2,650 for a 3 bedroom apartment. Based on the housing type that best fits your family needs, how much would you be willing to pay for a similar unit at a housing project at CSUDH?

[12] Van Westerndorp, P (1976) "NSS-Price Sensitivity Meter (PSM)- A new approach to study consumer perception of price." Proceedings of the ESOMAR Congress, Venice, Italy.

According to the PSM, values between the point of marginal cheapness and the point of marginal expensiveness represents the range of reasonable pricing values, but the intersection between the "too expensive" and "bargain" curves is referred as the "optimal price" point. Some scholars suggest using the optimal price point as the actual price, but others suggest simply using the point of marginal expensiveness[13]. The latter might be more consistent with the idea of charging people their maximum willingness to pay for a product.

Given the limited number of responses for studio apartments, the PSM results were computed and graphed for 1-3 bedroom apartments only. As mentioned before, the x-axis corresponds to price categories (from lowest to highest) and the y-axis corresponds to the cumulative probability.

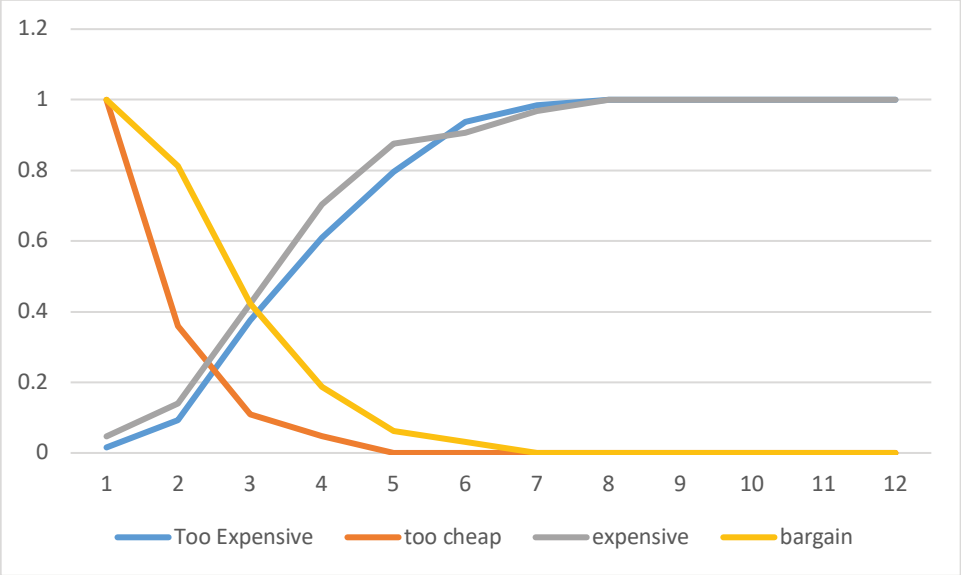

Figure 7. PSM for 1 bedroom apartment (n=64).

For 1 bedroom apartments, there were 64 valid responses[14]. The point of marginal cheapness was around $1,250 and the point of marginal expensiveness was around $1,400. The optimal price point is also around $1,400. For this particular housing unit, the average explicit willingness to pay was around $1,350. One could deduct that, without any specific information about the rental unit, respondents are willing to pay between $1,350 and $1,400 for a 1 bedroom apartment for rent on campus. According to actual rental market data, the current rental rate for a 1 bedroom apartment around campus is $1,531[15].

For 2 bedroom apartments, there were significantly more valid responses than for 1 bedroom apartments and studios, 152 in total. The point of marginal cheapness was around $1,500 and the point of marginal expensiveness was around $1,750. The optimal price point was around $1,650. For this particular housing unit, the average explicit willingness to pay was around $1,650. As before, one could deduct that, without any specific information about the rental unit, respondents are willing to pay between $1,650 and $1,750 for a 2 bedroom apartment for rent on campus. According to actual rental market data, the current rental rate for a 2 bedroom apartment around campus is $1,850.

[13] Chhabra S. (2015) Determining the Optimal Price Point: Using Van Westerndorp's Price Sensitivity Meter. Managing in Recovering Markets.

[14] A response is considered valid when the "too expensive" price is greater or equal than the explicit willingness to pay and the "bargain" price is greater or equal than the "too cheap" price.

[15] Average rental rates were computed for each rental unit type in a 3 miles radius from campus.

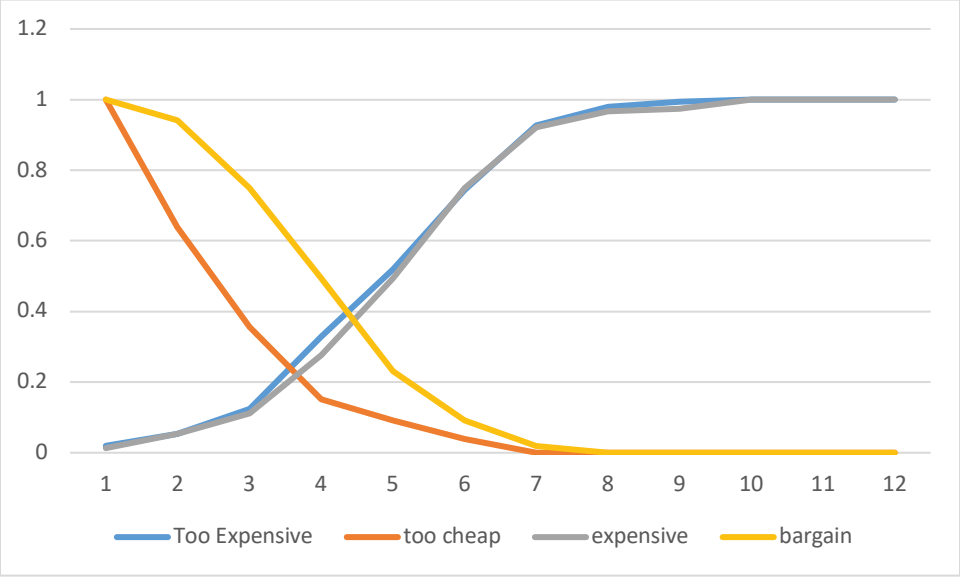

Figure 8. PSM for 2 bedroom apartment (n=152).

Finally, there were also significantly more valid responses for 3 bedroom apartments than for 1 bedroom apartments and studios, 138 in total. The point of marginal cheapness was around $1,750 and the point of marginal expensiveness was around $2,000. The optimal price point was around $1,900. For this particular housing unit, the average explicit willingness to pay was around $1,900. One could also deduct that, without any specific information about the rental unit, respondents are willing to pay between $1,900 and $2,000 for a 3 bedroom apartment for rent on campus. According to actual rental market data, the current rental rate for a 3 bedroom apartment around campus is $2,650.

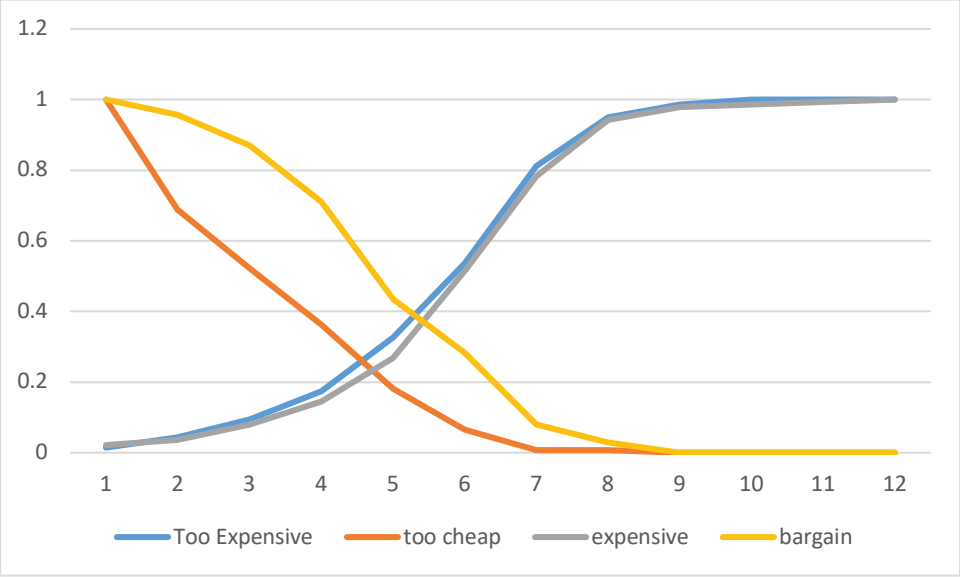

Figure 9. PSM for 3 bedroom apartment (n=138).

To summarize the implicit and explicit willingness to pay for different rental units on campus, **Table 2** summarizes the PSM estimates, the explicit willigness to pay, and the actual market rental rates for 1-3 bedroom apartments around campus. One thing to note is that the point of marginal expensiveness, which could represent the optimal price to charge, is slightly higher than the explicit willingness to pay for all unit types, and the difference seems to remain relatively constant across rental unit types. Also, the actual rental rates around campus are higher than the explicit willingness to pay and the point of marginal expensiveness for all unit types. The last 2 columns of Table 2 show the difference between the actual rental rates around campus for different rental units and the corresponding explicit willingness to pay and the point of marginal expensiveness. Once again, columns (A)-(C) are estimated based on responses without specific information about the rental units or the amenities around the proposed housing project. However, one could deduct that, given current rental market data, the proposed housing project on campus might have to offer rental units at a "discount" in order to attract more employees and the size of discount increases with the number of bedrooms.

Table 4. Explicit and Implicit Willingness to Pay

	(A)	(B)	(C)	(D)		
Rental Unit Type	**Point of Marginal Cheapness**	**Point of Marginal Expensiveness**	**Explicit Willingness to Pay**	**Actual Rate Around Campus**	**Gap 1 (D-B)**	**Gap 2 (D-C)**
1 Bedroom	$1,250	$1,400	$1,350	$1,531	$131	$181
2 Bedroom	$1,500	$1,750	$1,650	$1,850	$100	$200
3 Bedroom	$1,750	$2,000	$1,900	$2,650	$650	$750

6. ECONOMETRIC ANALYSIS

This section presents the econometric analysis results that considers the explicit willingness to pay for a housing unit on campus as the dependent variable and several demographic characteristics as explanatory variables. These demographic variables describe participants' gender, age, marital status, household characteristics, place of residence, employment at CSUDH, and housing ownership, expenditures, type, preferences, and satisfaction. Other variables were constructed to fit better the econometric model.

Table 5 presents the summary statistics for the dependent variable, Willingness to Pay, and independent variables used in regression. Willingness to Pay is constructed from the 12 price categories' responses for the explicit willingness to pay question, which is conditional on the type of housing chosen. Given that the difference between price categories is not constant (for example, difference between price categories 1 and 2 is not the same as the difference between categories 10 and 11) we decided to condense all the responses into 3 intuitive categories. These categories are represented by 3 values, one for below average (1), one for average (2), and one for above average (3) willingness to pay. As you can see in **Table 5**, the average Willingness to Pay roughly corresponds to a level 2.

Female and Married are dummy variables (1 if the response fits the category and 0 otherwise) and "Hhld Size" represents the number of occupants in the respondent's home. Minors, Elders, and Householder are dummy variables. Recent Hire is a dummy variable that takes on a value of 1 if the respondent has been employed at CSUDH from 0-2 years, and 0 otherwise. FT Staff is a dummy variable for full-time staff, and Tenured is a dummy variable for tenured faculty, which applies only to full-time faculty.

Travel Time to work, Distance to campus, Housing Expenses, Percentage of Income on Housing, and Family Income variables were constructed in a similar way than the dependent variable. From each variable, there are 3 different variables corresponding to average, below average (BA), and above average (AA). The omitted category for these variables is the average category. Single Family Home is a dummy variable and Very Satisfied is a dummy variable that corresponds to "very satisfied" in the current home satisfaction level question. Finally, Not Moving (LR) is a dummy for the long-term plans to move and Housing Choice corresponds to the 4 different rental housing options, Studio and 1-3 bedroom apartments.

Table 5. Regressions Summary Statistics					
					N=487
Variable		Mean	Std. Dev.	Min	Max
Willingness to Pay	2.08	0.82	1	3	
Female		0.64	0.48	0	1
Married		0.12	0.33	0	1
Hhld Size		2.72	1.41	1	9
Minors		0.34	0.47	0	1
Elders		0.13	0.33	0	1
Householder	0.82	0.38	0	1	
Recent Hire	0.28	0.45	0	1	
FT Staff		0.52	0.50	0	1
Tenured		0.85	0.36	0	1
Travel Time (BA)+	0.22	0.42	0	1	
Travel Time (AA)++	0.44	0.50	0	1	
Distance (BA)	0.33	0.47	0	1	
Distance (AA)	0.41	0.49	0	1	
Owns Home	0.42	0.49	0	1	
Important Owning	0.53	0.50	0	1	
Housing Expenses (BA)	0.21	0.41	0	1	
Housing Expenses (AA)	0.41	0.49	0	1	
Percentage Housing (BA)	0.31	0.46	0	1	
Percentage Housing (AA)	0.44	0.50	0	1	
Family Income (BA)	0.26	0.44	0	1	
Family Income (AA)	0.31	0.46	0	1	
Single Family Home	0.40	0.49	0	1	
Very Satisfied	0.28	0.45	0	1	
Not Moving (LR)	0.35	0.48	0	1	
Housing Choice	3.22	0.78	1	4	

Notes: + (BA) stands for below average. ++ (AA) stands for above average.

As our dependent variable, willingness to pay (WTP), is categorical, applying Ordinary Least Squares (OLS) regression might be innapropriate. A better alternative might be using Multinomial Logistic Regression (MLR), which can be used with categorical dependent variables and modeled using Maximum-Likelihood Estimation (MLE)[16]. This type of regression fits well when the dependent variable is coded as different categories, for example, marital status (married, divorced, never married, etc.), political affiliation (democrat, republican, independent, etc.), or the preferred item off a menu. In this case, the coefficent estimates relate information about how the independent variables affect the probability of belonging to each one of those categories.

However, in our case, the ordinal nature of the dependent variable categories has valuable information that MLR does not consider. In other words, the different WTP categories tell us something useful about different groups. Examples of ordinal categories include satisfaction levels (satisfied, neutral, dissatisfied), educational attainment (high school drop-out, high school certificate, college graduate, graduate degree), or, as in our case, willingness to pay (below average, average, above average). The coefficent estimates in this case relate inforamtion about how the independent variables affect the probability of moving to the next category. Correspondigly, we use an Ordered Probit Regression (OPR) model and estimate the model using MLE.

Table 6 presents the ordered probit estimates and the marginal effects estimates for the 3 different WTP categories for housing on campus for all survey respondents. The cut off points (Cut 1 & 2) refer to the sectioning points in the probability density function that result from the best fit estimation using MLE. The first column of **Table 6** presents the ordered probit coefficent estimates for WTP for a rental unit on campus. Given the ordered nature of the dependent variable, a positive (negative) sign for the estimated coefficient means that when the independent variable increases by one unit, the probability that the respondent belongs to a higher WTP category increases (decreases). Correspondingly, the probability that the respondent belongs to a lower WTP group decreases (increases).

According to the ordered probit coefficients, female respondents, households with elders, respondents who are a householder or spouse of a householder, households with above average housing expenses, and households with above average family income are statistically willing to pay more for a rental unit on campus. On the other hand, respondents with household expenses below average are statistically willing to pay less for a rental unit on campus. The variable for Household Choice goes from studios to 3 bedroom apartments, so it makes sense that this variable is also positively correlated with willingness to pay more for housing on campus.

The estimated OPR coefficients (betas) do not represent the partial derivatives of the regression function from a change in the independent variable, so they could not be readily interpreted as changes in probabilities, as with linear regression models. For OPR models, the marginal effects are computed in order to talk about changes in probabilities. The marginal effects from the ordered probit model are presented in the last 3 columns of **Table 6**. These marginal effects measure the change in the probabilities that a respondent belongs to each one of the 3 WTP categories when the independent variable increases by one unit. Consequently, the sum of the estimated changes in probabilities for all 3 categories must add up to zero.

[16] Econometric Analysis of Cross Section and Panel Data, Jeffrey Wooldridge 2nd edition (The MIT Press).

From the results, being female increases the probability of belonging to the above average WTP category by around 6 percentage points. Correspondingly, the probability of belonging to the below average category is reduced by around 6 percentage points for females. Respondents who have an elder at home have a 9 percent higher probability of belonging to the above average WTP category.

Being the householder or the spouse of householder increases the probability of having a higher WTP by almost 13 percent. The estimates for housing expenses suggest that respondents in households with above average housing expenses have a 10 percent higher probability of belonging to the above average WTP category and those with below average housing expenses have a 15 percent lower probability of belonging to the above average catergory. The intuition in this case might be that, since we are controlling for family income, this type of household are accustomed to spending more, so housing might be just one of those expenses. For family income, respondents who belong to a higher income family have a 14 percent higher probability of belonging to a higher WTP category, which suggests that housing is a normal good for this type of households. Finally, the estimates for housing choice suggest that those who choose a larger unit have almost 16 percent higher probability to belong to the above average WTP for housing on campus.

Given that WTP depends significantly on the housing choice, we analyze the WTP decisions for 2 & 3 bedroom apartments separately[17].

[17] The percentage of respondents that prefer a studio or 1 bedroom apartment is too low to provide reliable regression and marginal effects estimates.

Table 6. OProbit Results and Average Marginal Effects (Willingness to Pay)

	Oprobit	Below Average	Average	Above Average
Female	0.2293*	-0.0582*	-0.0004	0.0587*
	(0.1310)	(0.0331)	(0.0028)	(0.0333)
Married	-0.0429	0.0109	0.0001	-0.0110
	(0.1899)	(0.0482)	(0.0006)	(0.0486)
Hhld Size	0.0293	-0.0074	-0.0001	0.0075
	(0.0624)	(0.0158)	(0.0004)	(0.0160)
Minors	0.2295	-0.0583	-0.0004	0.0587
	(0.1673)	(0.0425)	(0.0027)	(0.0426)
Elders	0.3576*	-0.0908*	-0.0007	0.0915*
	(0.2017)	(0.0510)	(0.0043)	(0.0513)
House-holder	0.5058***	-0.1285***	-0.0009	0.1294***
	(0.1922)	(0.0479)	(0.0061)	(0.0490)
Recent Hire	0.0756	-0.0192	-0.0001	0.0193
	(0.1390)	(0.0353)	(0.0009)	(0.0355)
FT Staff	-0.1519	0.0386	0.0003	-0.0389
	(0.1466)	(0.0372)	(0.0018)	(0.0374)
Tenured	0.0171	-0.0043	-0.0000	0.0044
	(0.1869)	(0.0475)	(0.0004)	(0.0478)
Travel Time (BA)	-0.1706	0.0433	0.0003	-0.0437
	(0.1725)	(0.0437)	(0.0021)	(0.0441)
Travel Time (AA)	-0.2041	0.0518	0.0004	-0.0522
	(0.1574)	(0.0398)	(0.0025)	(0.0403)
Distance (BA)	0.0245	-0.0062	-0.0000	0.0063
	(0.1674)	(0.0425)	(0.0004)	(0.0428)
Distance (AA)	-0.0044	0.0011	0.0000	-0.0011
	(0.1666)	(0.0423)	(0.0003)	(0.0426)
Owns Home	-0.2058	0.0523	0.0004	-0.0527
	(0.1711)	(0.0435)	(0.0025)	(0.0436)
Important Owning	0.0291	-0.0074	-0.0001	0.0074
	(0.1287)	(0.0327)	(0.0004)	(0.0329)
Housing Expenses (BA)	-0.5864***	0.1489***	0.0011	-0.1500***
	(0.1791)	(0.0439)	(0.0071)	(0.0459)
Housing Expenses (AA)	0.4053***	-0.1029***	-0.0008	0.1037***
	(0.1457)	(0.0370)	(0.0048)	(0.0364)
Percentage Housing (BA)	0.1425	-0.0362	-0.0003	0.0365
	(0.1625)	(0.0412)	(0.0017)	(0.0415)
Percentage Housing (AA)	-0.1693	0.0430	0.0003	-0.0433
	(0.1497)	(0.0380)	(0.0020)	(0.0382)
Family Income (BA)	-0.2120	0.0538	0.0004	-0.0542
	(0.1609)	(0.0406)	(0.0026)	(0.0412)
Family Income (AA)	0.5631***	-0.1430***	-0.0011	0.1441***
	(0.1654)	(0.0422)	(0.0067)	(0.0405)
Single Family Home	0.1061	-0.0269	-0.0002	0.0271
	(0.1463)	(0.0372)	(0.0013)	(0.0373)
Very Satisfied	-0.0077	0.0019	0.0000	-0.0020
	(0.1443)	(0.0367)	(0.0003)	(0.0369)
Not Moving (LR)	-0.0201	0.0051	0.0000	-0.0051
	(0.1311)	(0.0333)	(0.0003)	(0.0335)
Housing Choice	0.6121***	-0.1555***	-0.0011	0.1566***
	(0.0994)	(0.0227)	(0.0074)	(0.0247)
cut1	2.0122***			
	(0.4179)			
cut2	3.3483***			
	(0.4338)			
N	430	430	430	430

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

According to OPR coefficient estimates from **Table 7**, household size and being full time staff are negatively correlated with WTP for a 2 bedroom apartment. Similarly, respondents with travel times above average and having housing expenses below average are less likely to be willing to pay more for a 2 bedroom apartment. On the other hand, respondents who have minors in the household, have family income above average, and own a single family home are more likely to be willing to pay more for a 2 bedroom apartment. One of the main differences for this group compared to all respondents is that the estimated coefficients for ordered probit and marginal effects for having above average WTP are negative and significant for full time faculty and respondents with above average travel time to work. Also, the results are positive and significant for households with minors and those who own a single family home.

In terms of marginal effects, having one more household member decreases the probability of having above average WTP for a 2 bedroom apartment by around 4 percent. Having minors in the household increases the probability of having above average WTP for a 2 bedroom apartment by around 12 percent. Full time staff have a 12 percent higher probability of having below average WTP for a 2 bedroom apartment. Those who have above average travel time are more likely of having below average WTP of about 13 percent. Having housing expenses below average increases the probability of having a WTP below average by almost 22 percent. Family income above average decreases the probability of having a WTP below average by almost 22 percent. Finally, respondents who own a single family home have an 8 percent higher probability of having a WTP above average for a 2 bedroom apartment.

Table 7. OProbit Results and Average Marginal Effects (Willingness to Pay) 2 Bedroom Apartment

	Oprobit	Below Average	Average	Above Average
Female	0.2364	-0.0682	0.0257	0.0424
	(0.2140)	(0.0612)	(0.0236)	(0.0386)
Married	0.1935	-0.0558	0.0210	0.0348
	(0.2788)	(0.0801)	(0.0304)	(0.0502)
Hhld Size	-0.2095*	0.0604*	-0.0228*	-0.0376*
	(0.1213)	(0.0343)	(0.0137)	(0.0221)
Minors	0.6885**	-0.1985**	0.0749**	0.1236**
	(0.2908)	(0.0812)	(0.0343)	(0.0532)
Elders	0.2672	-0.0771	0.0291	0.0480
	(0.3141)	(0.0905)	(0.0351)	(0.0562)
House-holder	-0.4191	0.1209	-0.0456	-0.0753
	(0.3133)	(0.0894)	(0.0348)	(0.0567)
Recent Hire	0.0381	-0.0110	0.0041	0.0068
	(0.2189)	(0.0631)	(0.0238)	(0.0393)
FT Staff	-0.4241*	0.1223*	-0.0461*	-0.0762*
	(0.2387)	(0.0676)	(0.0275)	(0.0431)
Tenured	0.2689	-0.0775	0.0292	0.0483
	(0.2956)	(0.0848)	(0.0326)	(0.0532)
Travel Time (BA)	-0.1610	0.0464	-0.0175	-0.0289
	(0.2814)	(0.0811)	(0.0310)	(0.0505)
Travel Time (AA)	-0.4466*	0.1288*	-0.0486*	-0.0802*
	(0.2452)	(0.0694)	(0.0284)	(0.0442)
Distance (BA)	-0.2191	0.0632	-0.0238	-0.0394
	(0.2694)	(0.0773)	(0.0295)	(0.0485)
Distance (AA)	-0.1364	0.0393	-0.0148	-0.0245
	(0.2612)	(0.0752)	(0.0285)	(0.0470)
Owns Home	-0.3685	0.1063	-0.0401	-0.0662
	(0.2883)	(0.0823)	(0.0322)	(0.0520)
Important Owning	0.3184	-0.0918	0.0346	0.0572
	(0.2175)	(0.0620)	(0.0247)	(0.0392)
Housing Expenses (BA)	-0.7474***	0.2155***	-0.0813**	-0.1342**
	(0.2889)	(0.0791)	(0.0322)	(0.0545)
Housing Expenses (AA)	0.4339*	-0.1251*	0.0472*	0.0779*
	(0.2399)	(0.0684)	(0.0283)	(0.0431)
Percentage Housing (BA)	0.1241	-0.0358	0.0135	0.0223
	(0.2461)	(0.0708)	(0.0268)	(0.0443)
Percentage Housing (AA)	-0.1201	0.0346	-0.0131	-0.0216
	(0.2339)	(0.0674)	(0.0256)	(0.0420)
Family Income (BA)	-0.2928	0.0844	-0.0319	-0.0526
	(0.2528)	(0.0721)	(0.0277)	(0.0457)
Family Income (AA)	0.7570**	-0.2183**	0.0823**	0.1360***
	(0.2970)	(0.0853)	(0.0399)	(0.0521)
Single Family Home	0.4329*	-0.1248*	0.0471	0.0778*
	(0.2589)	(0.0735)	(0.0293)	(0.0471)
Very Satisfied	0.2909	-0.0839	0.0316	0.0522
	(0.2287)	(0.0654)	(0.0257)	(0.0412)
Not Moving (LR)	0.0078	-0.0022	0.0008	0.0014
	(0.2116)	(0.0610)	(0.0230)	(0.0380)
cut1	-1.0619*			
	(0.5617)			
cut2	0.8352			
	(0.5605)			
N	175	175	175	175

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

The last ordered probit results and marginal effects are presented in **Table 8**, which corresponds to WTP for a 3 bedroom apartment. Similar to the results for all respondents and those who prefer a 2 bedroom apartment, the OPR estimated coefficients and marginal effects for having above average WTP are positive and significant for being female, having elders in the household, having above average housing expenses, and having family income above average. On the other hand, the estimated coefficients and marginal effects are negative and significant for being married and for those who are tenured and positive and significant for those with travel time below average.

Table 8. OProbit Results and Average Marginal Effects (Willingness to Pay) 3 Bedroom Apartment

	Oprobit	Below Average	Average	Above Average
Female	0.5153**	-0.1370**	0.0228	0.1141**
	(0.2077)	(0.0542)	(0.0163)	(0.0452)
Married	-0.6444*	0.1713*	-0.0285	-0.1427*
	(0.3570)	(0.0932)	(0.0221)	(0.0792)
Hhld Size	0.0932	-0.0248	0.0041	0.0206
	(0.0883)	(0.0234)	(0.0046)	(0.0195)
Minors	0.0202	-0.0054	0.0009	0.0045
	(0.2289)	(0.0608)	(0.0101)	(0.0507)
Elders	0.8065***	-0.2144***	0.0357	0.1787***
	(0.3076)	(0.0795)	(0.0242)	(0.0680)
Householder	0.4917	-0.1307	0.0218	0.1089
	(0.3380)	(0.0887)	(0.0190)	(0.0749)
Recent Hire	-0.1069	0.0284	-0.0047	-0.0237
	(0.2373)	(0.0630)	(0.0108)	(0.0526)
FT Staff	-0.1543	0.0410	-0.0068	-0.0342
	(0.2243)	(0.0596)	(0.0108)	(0.0496)
Tenured	-0.6214**	0.1652**	-0.0275	-0.1377**
	(0.2956)	(0.0780)	(0.0213)	(0.0644)
Travel Time (BA)	0.6356**	-0.1689**	0.0281	0.1408**
	(0.2954)	(0.0769)	(0.0204)	(0.0653)
Travel Time (AA)	0.1131	-0.0301	0.0050	0.0251
	(0.2535)	(0.0673)	(0.0116)	(0.0561)
Distance (BA)	-0.2181	0.0580	-0.0097	-0.0483
	(0.2811)	(0.0744)	(0.0133)	(0.0624)
Distance (AA)	0.2110	-0.0561	0.0093	0.0467
	(0.2627)	(0.0697)	(0.0130)	(0.0580)
Owns Home	-0.1133	0.0301	-0.0050	-0.0251
	(0.2441)	(0.0648)	(0.0113)	(0.0540)
Important Owning	-0.1139	0.0303	-0.0050	-0.0252
	(0.2086)	(0.0554)	(0.0097)	(0.0462)
Housing Expenses (BA)	-0.3808	0.1012	-0.0169	-0.0843
	(0.3213)	(0.0848)	(0.0166)	(0.0715)
Housing Expenses (AA)	0.6879***	-0.1828***	0.0305	0.1524***
	(0.2205)	(0.0569)	(0.0204)	(0.0477)
Percentage Housing (BA)	0.1568	-0.0417	0.0069	0.0347
	(0.2716)	(0.0721)	(0.0126)	(0.0602)
Percentage Housing (AA)	-0.2626	0.0698	-0.0116	-0.0582
	(0.2330)	(0.0618)	(0.0127)	(0.0512)
Family Income (BA)	0.0787	-0.0209	0.0035	0.0174
	(0.2920)	(0.0776)	(0.0131)	(0.0647)
Family Income (AA)	0.4855**	-0.1291**	0.0215	0.1076**
	(0.2166)	(0.0570)	(0.0159)	(0.0476)
Single Family Home	-0.1908	0.0507	-0.0084	-0.0423
	(0.2132)	(0.0566)	(0.0107)	(0.0472)
Very Satisfied	-0.0087	0.0023	-0.0004	-0.0019
	(0.2135)	(0.0568)	(0.0095)	(0.0473)
Not Moving (LR)	-0.1090	0.0290	-0.0048	-0.0241
	(0.1982)	(0.0526)	(0.0092)	(0.0439)
cut1	0.0117			
	(0.6442)			
cut2	1.8677***			
	(0.6578)			
N	180	180	180	180

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

To summarize the ordered probit results and the above and below WTP marginal effects, **Table 9** presents only the results that are significantly correlated with WTP for all respondents and those choosing a 2 & 3 bedroom apartments. The sign (+ or -) corresponds to positive or negative coefficient and marginal effect estimates and the number of signs corresponds to the significance level (3 signs for p<0.01, 2 signs for p<0.05, and 1 sign for p<0.10).

Table 9. OProbit Results and Average Marginal Effects (Significant Results)

	Oprobit			Below Average			Above Average		
	All	2 bdr	3 bdr	All	2 bdr	3 bdr	All	2 bdr	3 bdr
Female	+		++	-		--	+		++
Married			-			+			-
Hhld Size		-			+			-	
Minors		++			---			++	
Elders	+		+++	-		---	+		+++
Householder	+++			---			+++		
FT Staff		-			+			-	
Tenured			--			++			--
Travel Time (BA)			++			--			++
Travel Time (AA)		-			+			-	
Housing Expenses (BA)	---	---		+++	+++		---	--	
Housing Expenses (AA)	+++	+	+++	---	-	---	+++	+	+++
Family Income (AA)	+++	++	++	---	--	--	+++	+++	++
Single Family Home		+			-			+	
Housing Choice	+++			---			+++		

Direction of relationship is represented with + or -; strength of relationship is represented by the number of symbols, e.g. +++: p=0.01, ++: p=0.05, +: p=0.10

7. LIMITATIONS AND EXTENSIONS

This faculty and staff housing survey solicited information from part-time and full-time staff and faculty, including administrators, regarding their current housing situation, potential interest in residing on a campus housing project, residential amenities they value, cost considerations, and other important factors regarding housing. In terms of the existing literature, this project represents a contribution to the study of the determinants of housing choice by university faculty and staff. Consequently, the findings from this study can be used by administrators to evaluate the extent campus programs could encourage faculty and staff to live closer to campus.

However, the findings from this study cannot answer some specific questions that might be of special interest to decision makers in order to assess the economic viability of a housing project for faculty and staff at CSU Dominguez Hills. For example, what percentage of faculty and staff might be willing to change their current housing situation to move to a housing unit on campus? In fact, we estimate that few faculty and staff, particularly those in families who already own a house, might be willing to move to a housing unit on campus.

For recent and incoming hires, what percentage of new faculty and staff are willing to move to a housing unit on campus and what role did the availability or the lack of housing on campus play in their decision to apply for a job and in the decision to accept a position at CSU Dominguez Hills?

To answer the latter, perhaps a separate survey that covers faculty and staff at CSU Dominguez Hills would provide more specific answers. Such survey might be applied not only for all job separations or declined offers by top candidates, but also for faculty and staff accepting employment at CSU Dominguez Hills.

As reference, the CSU Report on the 2018 Faculty Recruitment and Retention Survey applies mainly to newly hired faculty. This survey presents demographic information on new tenure-track faculty, which includes race, ethnicity, years of experience, citizenship, starting salary, and previous employment. The report focuses also on the number of tenure-track searches, the number of completed applications, and the success rate for those searches in all CSU campuses, by discipline[18].

In terms of faculty separations and resignations, the survey presents the main reasons offered by faculty. Among these, to accept another job represents more than 56 percent of responses. In addition, the report presents the primary reasons offered by top faculty candidates that declined offers of employment at a CSU campus. Among successful searches, better offer elsewhere, family/personal reasons, and inadequate salary represent almost 75 percent of responses. High cost of housing represents only around 1 percent of responses. Given the extremely small sample size, this is hardly evidence that housing affordability and availability do not play a role in the hiring and retention of faculty and staff at CSU Dominguez Hills and the CSU system.

8. CONCLUSIONS

The SBEI at CSUDH developed and implemented a faculty and staff housing survey to assess their current housing situations and their level of interest in residing in an on-campus housing project proposed by the University as part of the University Village Development project. In particular, this research project aims to make the first steps to gain a deeper understanding of faculty and staff housing choices, the factors influencing them, and to what extent campus programs could encourage faculty and staff to live closer to campus.

The survey responses were used to develop a picture of demographic characteristics of part-time and full-time faculty and staff, and the results were compared for different groups. Additionally, the survey responses allowed the development of maps that present the geographical distribution of faculty, staff, and specific academic groups. The application of the Price Sensitivity Meter technique and an econometric analysis allowed us to calculate the respondents' willingness to pay for different housing options and the factors that affect such willingness to pay.

Overall, the results from this faculty and staff housing survey might represent a valuable tool to the University administration when trying to attract and retain valuable faculty and staff in order to fulfill the university mission to provide education, scholarship, and service that are, by design, accessible and transformative. This becomes particularly important given that several other CSU campuses already offer some type of faculty and staff housing assistance. Furthermore, this survey might inform the University administration as it tries to convert CSU Dominguez Hills from a commuter campus to a destination campus.

[18] According to the report, in all disciplines in 2018, there were 35 and 734 appointments of new tenure-track faculty at CSU Dominguez Hills and the CSU system, respectively.

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APPENDIX A. SURVEY QUESTIONS AND OPEN-ENDED RESPONSES

Table A1. Faculty and Staff Housing Questionnaire

Q1 **Gender**

Female

Male

Nonbinary

Q2 **Age**

18-24

25-34

35-44

45-54

55-64

65+

Q3 **Marital Status**

Married

Widowed

Divorced

Separated

Never married

Q4 **Household Size (including yourself)**

1-12+

Q5 **How many household members (including yourself) belong to the following age categories?**

Under 18

18-24

25-34

35-44

45-54

55-64

65+

Q6 **Which of the following best describes your relationship in the household?**

Householder or spouse of householder

Relative of householder (son, daughther, etc.)

Relative of householder (other relative)

Non-relative of householder

Q7 **What city do you live in?**

City (please specify)

Q8 **What zip code do you live in?**

Zip code (please specify)

Q9 **How many years have you been employed by CSUDH?**

Less than 1 year

1-2 years

3-4 years

5-6 years

7-8 years

9-10 years

11-15 years

16-20 years

More than 20 years

Q10 **Which one of the following best describes your position at CSUDH?**

Part-Time Staff

Full-Time Staff

Part-Time Faculty

Full-Time Faculty*

Q11* **What is your current academic title?**

Lecturer

Assistant Professor

Associate Professor

Professor

Q12 **Main mode of transportation to work**

Car, truck, or van (drive alone)*

Car, truck, or van (carpool)*

Transit - public transportation

Plane

Motorcycle

Bicycle

Walk

Q13* **Do you have an efficient vehicle that qualifies you for carpool lane access?**

Yes

No

Q14 **Typical travel time (home to work)**

Less than 5 Minutes

5 to 9 Minutes

10 to 14 Minutes

15 to 19 Minutes

20 to 24 Minutes

25 to 29 Minutes

30 to 34 Minutes

35 to 39 Minutes

40 to 44 Minutes

45 to 59 Minutes

60 to 89 Minutes

90 or more Minutes

Q15 **Typical travel time (work to home)**

Less than 5 Minutes

5 to 9 Minutes

10 to 14 Minutes

15 to 19 Minutes

20 to 24 Minutes

25 to 29 Minutes

30 to 34 Minutes

35 to 39 Minutes

40 to 44 Minutes

45 to 59 Minutes

60 to 89 Minutes

90 or more Minutes

Q16 **Distance from home to CSUDH (estimate)**

0-2 Miles

3-5 Miles

6-10 Miles*

11-15 Miles*

16-20 Miles*

21-30 Miles*

31-40 Miles*

41-50 Miles*

More than 50 Miles*

Q17* **Please select up to 3 main reasons you do not to live closer to campus**

Higher housing prices near campus

Less than desired quality of housing near campus

Pre K-12 school quality less than desired near campus

Prefer to live close to spouse's work

Prefer to live close to family or friends

Location amenities less than desired near campus

City services less than desired near campus

Insecurity or crime higher than desired near campus

N/A (Living 0-5 miles from CSUDH)

Other (please specify)

Q18 **How important do you consider owning a home?**

Very important

Important

Somewhat important

Somewhat unimportant

Unimportant

Very unimportant

Q19 **Current home ownership**

Own (paid off)

Own (mortgage)

Rent

No cash rent

Q20 **Current monthly housing expenses (rent or mortgage (excluding property taxes, utilities, and other charges))**

$0-$500

$501-$1,000

$1,501-$2,000

$2,001-$2,500

$2,501-$3,000

$3,001-$3,500

$3,501-$4,000

$4,001-$4,500

$4,501-$5,000

More than $5,000

Q21 **Roughly speaking, what percentage of your family gross monthly income goes to rent or mortgage?**

Less than 10%

10-14.9%

15-19.9%

20-24.9%

25-29.9%

30-34.9%

35-39.9%

40-49.9%

50% or more

Q22 **Roughly speaking, what is your total annual pre-tax family income?**

Less than $35,000

$35,000-49,999

$50,000-74,999

$75,000-99,999

$100,000-149,999

$150,000-199,999

$200,000 or more

Q23 **What type of housing best describes your current home?**

Single family home - detached

Single family home - attached

Apartment

Condo, co-ops

Townhome

Manufactured or mobile home

Car, van, or RV

Other

Q24 **Were you to move to a rental unit near campus, which one of the following housing types would best fit your family housing needs? (please choose only one)**

Studio apartment

1-bedroom apartment

2-bedroom apartment

3-bedroom apartment

Q25 **Given your previous choice, at what monthly rate would you start to consider it getting too expensive that you would not consider renting it?**

Less than $1,000

$1,000-$1,250

$1,251-$1,500

$1,501-$1,750

$1,751-$2,000

$2,001-$2,500

$2,501-$3,000

$3,001-$3,500

$3,501-$4,000

$4,001-$4,500

$4,501-$5,000

More than $5,000

Q26 **Given your previous choice, at what monthly rate would you start to consider it getting too cheap that you would start questioning its quality?**

Less than $1,000

$1,000-$1,250

$1,251-$1,500

$1,501-$1,750

$1,751-$2,000

$2,001-$2,500

$2,501-$3,000

$3,001-$3,500

$3,501-$4,000

$4,001-$4,500

$4,501-$5,000

More than $5,000

Q27 **Given your previous choice, at what monthly rate would you start to consider it getting expensive, so it is not completely out of the question, but you must spend more time thinking about it before renting it?**

Less than $1,000

$1,000-$1,250

$1,251-$1,500

$1,501-$1,750

$1,751-$2,000

$2,001-$2,500

$2,501-$3,000

$3,001-$3,500
$3,501-$4,000
$4,001-$4,500
$4,501-$5,000
More than $5,000

Q28 Given your previous choice, at what monthly rate would you start to consider it a bargain, a great value?

Less than $1,000
$1,000-$1,250
$1,251-$1,500
$1,501-$1,750
$1,751-$2,000
$2,001-$2,500
$2,501-$3,000
$3,001-$3,500
$3,501-$4,000
$4,001-$4,500
$4,501-$5,000
More than $5,000

Q29 Around campus, the average monthly rental rate is $1,195 for a studio, $1,531 for a 1 bedroom apartment, $1,850 for a 2 bedroom apartment, and $2,650 for a 3 bedroom apartment. Based on the housing type that best fits your family needs, how much would you be willing to pay for a similar unit at a housing project at CSUDH?

Less than $1,000
$1,000-$1,250
$1,251-$1,500
$1,501-$1,750
$1,751-$2,000
$2,001-$2,500
$2,501-$3,000
$3,001-$3,500
$3,501-$4,000
$4,001-$4,500
$4,501-$5,000
More than $5,000

Q30 For a faculty-staff housing project at CSUDH, please select up to 3 of the most important amenities.

Groceries store
Commercial space, including restaurants
Fitness and wellness center
Well-maintained common areas
Access to childcare services
Proximity to public transportation
Secured access
Covered parking
Pet friendly facilities

Q31 Which one of the following best describes your short-term housing plans (0-2 years)?

Moving within same city
Moving to another city within same county
Moving to another county
Moving out of state
Moving out of the country
Not planning to move

Q32 Which one of the following best describes your longer-term housing plans (more than 2 years)?

Moving within same city
Moving to another city within same county
Moving to another county
Moving out of state
Moving out of the country
Not planning to move

Q33 How would you rate the level of satisfaction with your current home?

Very satisfied*
Satisfied*
Neither satisfied nor dissatisfied
Dissatisfied
Very dissatisfied

Q34* Please choose up to 3 of the main reasons why you are not satisfied or very satisfied with your current home.

Inadequate size (too small, too big, etc.)
Too expensive
Too far from work
Pre K-12 school low quality
Lack of location amenities
Inadequate city services
High insecurity and crime
Other (please specify)

Table A2. Responses to "Other" Category for Reasons Not to Live Closer to Campus.

- Already had my home before working here
- Already have a home
- Already have a home relatively close by.
- Already lived in the area before CSUDH
- Already living in Long Beach when hired at CSUDH
- Already owned a house that was farther from campus
- Availability of housing near campus not abundant enough in choice
- Availability of nature/parks/trails
- Beach. I grew up here
- Better access to nature
- Better investment in good neighborhoods
- Can't afford to buy a house
- Can't afford a place on my own
- Carson has terrible restaurants! No bars!
- Carson is not a great city to live in
- Children's existing school
- City I have lived in for 17 years
- Close to beach
- Didn't buy in this area
- Economic convenience - Saving to buy a home.
- Enjoy where I am at
- Half way between both jobs
- Have been in this house for a long time
- Have been living in same city for 36 years
- Have lived in this house for 30 years
- Have owned home for 15+ years
- Have owned home for 30 years.
- Have owned home for over 20 years. Purchased before teaching career started
- high quality rental house
- Home purchased before working at CSUDH
- homeowner prior to employment at CSUDH and soft real estate market makes selling to relocate difficult
- House is paid for
- Housing costs
- Husband is military so live in military housing
- I am 25 and as this is my first full time professional job, I cannot afford to live on my own yet. So I live with parents for now.
- I bought condo before starting at DH
- I bought my dream home several years before I took this job. :)
- I bought the home prior to taking this job.
- I cannot afford to buy a home and have rent stabilization
- I cannot afford to live on my own on an adjunct salary, and I'm not even working this semester (since I was not given any classes), so I have to live with my family.
- I do live close to campus
- I do live close to campus

- I do live reasonably close to CSUDH. Nevertheless, there is always a lot of traffic both ways.
- I do not yet qualify to purchase own home
- I have been living in my area for many years and never thought about moving.
- I have lived in Long Beach for 25 years and consider 20 minutes to be a short commute!
- I have mostly on-line courses, but would be more likely to consider a full-time faculty position if commute was reasonable.
- I just picked something fairly close in an area I was vaguely familiar with since I was moving from Virginia and wasn't going to be able to view properties in person.....
- I like livingin West Los Angeles - nicer area
- I like my house
- I like where I live and prefer to commute
- I live close enough.
- I live close to campus in a terrible neighborhood that I do not feel safe in, but at least I don't have a lengthy commute
- I live in Orange County and teach at many schools.
- I love where I live
- I own a home and don't want to move
- I own my home and have lived here for 25 years, since before starting at CSUDH
- I own my home where I currently reside
- I spend the majority of my day at work, so I am not going to rent somewhere to spend $1,000+ a month and just sleep there. Luckily my parents allow me to stay with them.
- I used to work at a location 35 miles away and took my job at DH due to proximity to home
- I work elsewhere as well, and this is where I bought my house.
- I would prefer live closer to campus if I can afford it
- I'd actually prefer to live in Long Beach, but chose a location based on the route which is surface roads instead of highway.
- I'd rather live at the beach
- If the university provided affordable housing on or near campus, I would consider moving
- In the past, it was a central location for work and childrens' schools.
- Kids attending university and college in SD
- LA is an ugly, unaffordable, unlivable mess of a city
- Lack of apartments.
- Live at home with parents
- lived in current house for over twenty years
- Lived in the house before starting at CSUDH; don't want to move
- Lived there before I got the job, didnt want to move my kids
- Living in/maintaining a family property owned for over 50 years
- Long Beach is more walkable city than Carson
- Long Beach is our home city.
- Love being near the beach and I consider the commute easy.
- Love living at the beach
- Mid point between Spouse Work and Self
- Middle location for both work places (Self and Spouse)
- My house is paid. I could sell it, but not afford the price of a nice house near campus
- Near the beach!!!
- Need to live central to various colleges
- New to area and am unfamiliar with Carson.

- Nicer area, walkability, cafes, restaurants,direct access to beach and bike paths
- No long-term security for lecturer positions. I could be let go at any time, so there's no incentive to move my entire family closer to campus.
- Owened home before employment at csudh
- Own a home
- Own a home in current city
- Own a home in present area
- Own a house
- Personal preference
- Pollution from the refineries lgbtq population food choices nature
- Prefer living near the beach.
- Prefer that where I live and where I work are separate places in general. Regardless of quality of life, I would choose to live a distance from where I work.
- Prefer to live away from work
- Prefer to live by the beach
- Prefer to live close to beach
- Prefer to live close to the beach
- Prefer to live close to the beach
- Prefer to live closer to spouse's job opportunities
- Prefer to stay in Whittier
- Prices to high in good areas
- Property lot sizes are too small in Carson compared to what I have in Compton.
- Proximity to Pacific Ocean
- Purchased home outside of County
- Purchased house before working for CSUDH
- Purchases my home 23 yeears ago
- The roads are horrible with higher priced gas stations.
- Wages are too low for the surrounding areas near work
- Wages too low to afford to support family and live on our own
- Walkability/amenities near campus
- We are settled in our neighborhood and I am only working part-time. I would only move for a full-time permanent position.
- We like living by the ocean
- We like our house in Long Beach because its close to the water.
- We live closer to our other jobs/universities
- We want to live close to the beach.
- We've lived in El Segundo a long time, and wouldn't move.
- We've lived where we are for 15+ years.
- Within years of paying off my house
- Work off campus

Table A3. Responses to "Other" Category for Reasons Not to Being Very Satisfied or Satisfied with Current Housing.

- Bugs
- Building is too old.
- California Culture
- Cheap construction (thin walls and ceilings - no privacy; dirty
- Condition is run down
- Dismissive landlord
- Electric car parking area where homeless live
- I am living with my parent to save money to buy my own home. I also have a teenager of my own. We each have our own room, but we are bursting at the seems.
- I am satisfied with my current accommodations
- Inadequate management of the property
- Interior needs updating
- It needs a lot of work / upgrades
- Lack of adequate parking
- Lack of parking
- Lack of parking, no yard, loud neighbors
- Lack of privacy
- Lack of privacy
- Low building quality
- Lundary, noise, not taken care properly
- Maintenance and upkeep; need to fix a lot of old stuff
- Needs a lot of repairs
- Needs remodelings
- Neighbors
- Older, apartment--want a house with outdoor space, etc.
- Only rent
- Parking is horrible every day of the week. Feel caged on weekends...to afraid to leave the house due to no parking.
- Pollution, the building was built next to the freeway.
- Privacy
- Rental. Constant construction throughout apartment complex
- Sharing house with another famiy
- Sharing with mates
- Slumlord doesn't care about building
- The owner draws in renters with lower rental rates, then raises them significantly over subsequent years. It's very frustrating.
- Too close to freeway wall
- Too old
- Very limited parking
- Want to own, not rent; want a detached house
- We would like to downsize and be able to see the ocean.

APPENDIX B. HOUSING PRICES AROUND CSU CAMPUSES

In order to provide context to the analysis of housing interests and needs for the CSUDH community, this section presents the current housing market conditions around CSUDH and other CSU campuses and a brief review of housing projects for faculty and/or staff already in place by other CSU and UC campuses. For the latter, the information presented comes mainly from promotional material found on the universities' websites. In perhaps a future research project, we would like to obtain information about the level of success, the extent of utilization, and overall satisfaction level of tenants/owners in those housing projects.

Is availability of affordable housing a real problem affecting the hiring and retention of faculty and staff? This is one of the unanswered questions, but the report on faculty shows some evidence for faculty. Report on faculty shows some information for resignations and reasons for not accepting an offer. No evidence of lack of interest to live in the area based on number of applications and hiring success rates.

Limitations, cannot say if people would move from their current housing to a housing unit on campus. In fact, we suspect that people who already own homes are very unlikely to move.

Table B1 presents the estimated average rental rates for studios and 1-3 bedroom apartments around campus (within 3-10 miles) based on 2018 data. Keep in mind that the proposed housing project on campus includes only these types of apartments for rent. The rental rates for all apartment types increase as the radius is increased from 3 to 5 miles. As you get from 5 to 10 miles from campus, the rental rates for studios increases, but the rates for all other apartment types decrease. For reference, prices of rentals and homes around all CSU campuses are provided in **Tables B2-B5**.

Table B1. Current Apartment Rental Market Rates around CSUDH, 2018

Type	Within 3 Miles	Within 5 Miles	Within 10 Miles
Studio	$1,195	$1,225	$1,451
1 Bedroom	$1,531	$1,768	$1,644
2 Bedroom	$1,850	$2,265	$2,003
3 Bedroom	$2,650	$2,811	$2,157

Source: Based on authors calculations using data from apartments.com, realtor.com, rent.com, zumper.com, and collegestudentapartments.com.

Table B2. Average Rental Prices around CSU Campuses, 2018 (Within 3 Miles)					
CSU	**City**	**Studio**	**1Bedroom**	**2Bedrooms**	**3Bedrooms**
Bakersfield	Bakersfield	$678	$861	$1,089	$1,165
Channel Islands	Camarillo	N/A	$2,123	$2,258	$3,065
Chico	Chico	N/A	$742	$1,056	$1,987
Dominguez Hills	Carson	$1,195	$1,531	$1,850	$2,650
East Bay	Hayward	N/A	$1,930	$2,360	$2,565
Fresno State	Fresno	N/A	$1003	$1201	$1455
Fullerton	Fullerton	$1,511	$1,562	$2,327	$2,555
Humboldt	Arcata	$745	$1023	$1268	$1650
Long Beach	Long Beach	$1,368	$2,464	$3,239	$3,607
Los Angeles	Los Angeles	$1,700	$1,350	$2,148	$2,637
Maritime	Vallejo	N/A	$1,753	$1,915	$2,273
Monterey Bay	Seaside	$1,250	$1,570	$1,692	$2,630
Northridge	Northridge	$1,027	$1,505	$2,314	$2,625
Pomona	Pomona	$1172	$1482	$1800	$1950
San Bernardino	San Bernardino	$987	$1,250	$1,662	$1,740
San Marcos	San Marcos	$1,813	$1,866	$2,307	$3,313
San Luis Obispo	San Luis Obispo	$1100	$1996	$2518	$2800
Sacramento	Sacramento	$980	$1347	$1669	$2161
San Diego	San Diego	$1423	$1473	$1951	$2574
San Francisco	San Francisco	$2376	$2776	$3842	$4912
San Jose	San Jose	$1891	$2155	$2882	$3851
Sonoma	Rohnert Park	N/A	1603	$1985	$2642
Stanislaus	Turlock	$883	$1036	$1275	$1716

Source: Based on authors calculations using data from apartments.com, realtor.com, rent.com, zumper.com, and collegestudentapartments.com.

Table B3. Average Rental Prices around CSU Campuses, 2018 (Within 5 Miles)					
CSU	**City**	**Studio**	**1Bedroom**	**2Bedrooms**	**3Bedrooms**
Bakersfield	Bakersfield	$654	$836	$968	$1,154
Channel Islands	Camarillo	$1,619	$1,950	$2,270	$2,894
Chico	Chico	N/A	$1,069	$1,313	$1,539
Dominguez Hills	Carson	$1,225	$1,768	$2,265	$2,811
East Bay	Hayward	$1,813	$1,962	$2,480	$3,195
Fresno	Fresno	$723	$947	$1,162	$1,598
Fullerton	Fullerton	$1,779	$1,913	$2,369	$2,757
Humboldt	Arcata	N/A	$993	$1,290	$1,455
Long Beach	Long Beach	$1,455	$1,816	$2,163	$2,376
Los Angeles	Los Angeles	$2,083	$2,427	$2,782	$3,239
Maritime	Vallejo	$1,467	$1,768	$2,111	$2,342
Monterey Bay	Seaside	$1,479	$1,762	$2,285	$2,838
Northridge	Northridge	$1,562	$1,894	$2,292	$2,850
Pomona	Pomona	$1,344	$1,514	$1,803	$2,043
Sacramento	Sacramento	$1,358	$1,520	$1,844	$2,004
San Bernardino	San Bernardino	$922	$1,102	$1,249	$1,506
San Diego	San Diego	$1,613	$1,893	$2,318	$2,843
San Francisco	San Francisco	$2,425	$2,968	$3,642	$4,983
San Jose	San Jose	$2,188	$2,443	$3,010	$4,175
San Luis Obispo	San Luis Obispo	$1,324	$1,787	$1,875	$2,621
San Marcos	San Marcos	$1,706	$1,708	$2,057	$2,402
Sonoma	Rohnert Park	$1,807	$1,731	$2,079	$2,153
Stanislaus	Turlock	$930	$1,056	$1,258	$1,587

Source: Based on authors calculations using data from apartments.com, realtor.com, rent.com, zumper.com, and collegestudentapartments.com.

Table B4. Average Rental Prices around CSU Campuses, 2018 (Within 10 Miles)					
CSU	**City**	**Studio**	**1Bedroom**	**2Bedrooms**	**3Bedrooms**
Bakersfield	Bakersfield	$625	$658	$897	$1,096
Channel Islands	Camarillo	$1,507	$1,871	$2,108	$2,917
Chico	Chico	N/A	$1,064	$1,151	$1,471
Dominguez Hills	Carson	$1,451	$1,644	$2,003	$2,157
East Bay	Hayward	$2,142	$2,365	$2,752	$3,499
Fresno	Fresno	$791	$931	$1,135	$1,518
Fullerton	Fullerton	$1,369	$1,553	$1,913	$2,352
Humboldt	Arcata	N/A	$900	$1,250	$1,373
Long Beach	Long Beach	$1,722	$1,837	$2,198	$2,401
Los Angeles	Los Angeles	$1,985	$2,282	$2,851	$3,377
Maritime	Vallejo	$2,095	$2,120	$2,479	$2,884
Monterey Bay	Seaside	$1,410	$1,489	$1,823	$2,586
Northridge	Northridge	$1,505	$1,875	$2,400	$2,954
Pomona	Pomona	$1,391	$1,567	$1,857	$2,423
Sacramento	Sacramento	$1,433	$1,595	$1,764	$1,761
San Bernardino	San Bernardino	$983	$1,083	$1,257	$1,619
San Diego	San Diego	$1,783	$2,006	$2,474	$2,956
San Francisco	San Francisco	$3,147	$3,490	$4,780	$5,182
San Jose	San Jose	$2,113	$2,381	$2,903	$3,532
San Luis Obispo	San Luis Obispo	$1,377	$1,802	$2,261	$2,722
San Marcos	San Marcos	$1,372	$1,688	$2,005	$2,463
Sonoma	Rohnert Park	$1,688	$1,890	$2,240	$2,651
Stanislaus	Turlock	$918	$1,066	$1,245	$1,485

Source: Based on authors calculations using data from apartments.com, realtor.com, rent.com, zumper.com, and collegestudentapartments.com.

Table B5. Average Rental Prices around CSU Campuses, 2018 (Within 10 Miles)		
	Median Home Value	Median Rent
CALIFORNIA STATE SYSTEM		
Cal Poly - SLO	$605,000	$2,750
Cal Poly - Pomona	$359,000	$1,997
CSU - Bakersfield	$227,000	$1,450
CSU - Channel Islands	$550,000	$2,625
CSU - Chico	$305,000	$1,585
CSU - Dominguez Hills	$450,000	$2,635
CSU - East Bay	$525,000	$2,750
CSU - Fresno	$223,500	$1,350
CSU - Fullerton	$594,500	$2,800
CSU - Long Beach	$495,000	$2,500
CSU - Los Angeles	$701,000	$4,200
CSU - Monterey Bay	$669,000	$2,875
CSU - Northridge	$701,000	$4,200
CSU - Sacramento	$273,000	$1,595
CSU - San Bernardino	$236,000	$1,499
CSU - San Marcos	$540,500	$2,595
CSU - Stanislaus	$290,000	$1,455
Humboldt State	$325,500	$1,327
San Diego State	$515,000	$2,700
San Francisco State	$1,150,000	$4,600
San Jose State	$803,000	$3,400
Sonoma State	$435,000	$2,675
Cal Maritime	$325,000	$1,950

Source: CABO Report, 2016

APPENDIX C. FACULTY & STAFF AFFORDABLE HOUSING PROGRAMS AT OTHER CSU CAMPUSES

The section illustrates some of the housing and development projects at different CSU campuses to try to address their employees' housing needs, promote recruitment, improve retention, increase productivity, and improve employee engagement on campus and with their communities. This analysis can provide CSUDH with some background regarding the successful development projects at different CSU campuses to replicate or emulate. At the same, it can help CSUDH avoid some of the pitfalls of other CSU staff and faculty housing projects.

Cal State University Northridge - CSUN

The North Campus Development Corporation (NCDC), established in 1981, is a nonprofit auxiliary of CSUN to oversee the development of sixty-five acres of CSUN housing. NCDC has a long lease with Medtronic/ MiniMed Corporation that occupies the northern twenty-four acres of North Campus at CSUN.

CSUN housing resources include the College Court Townhomes, developed for CSUN faculty and staff, and is within walking distance from CSUN campus (across the street from CSUN). They are located in a park-like setting. Two Floor plans are available in a gated community with private patios on lower units and decks on upper units. The one bedroom units include a dining bar while two bedrooms include separate dining area and large closest.

The two bedrooms units have has two master bedroom suites and a bonus room. This include walk-in closets, vaulted ceilings, and some fireplace. Residents can also have access to communal pool, children's playground, and recreation room. However, residents are responsible for all utilities (gas, electricity, cable, phone...etc.)

CSUN also offers single family homes, which consists of spacious 2600 square foot homes with a large backyard for entertainment. Residents pays all utilities: gas, electric, water, trash, phone, and cable.

CSUN housing also includes hotel suite style guest housing at a daily rate. Each suite includes a bedroom and one bath. They include different amenities within walking distances to campus. Amenities include a 26-inch flat-screen living room TV and a 19-inch flat-screen bedroom TV that includes free Direct TV.

- Two full-sized beds and a sleeper sofa
- Alarm clock, iron and ironing board
- Kitchen with refrigerator, stove, microwave, coffee maker, toaster and cooking items (e.g., pots, pans, dishes and utensils)
- Internet and landline phones are not available.
- Guests benefiting from these suites include visiting professors, College administrators from other CSU campuses conducting business with CSUN, visiting Students' parents, and participants in university programs and workshops

- Suite Rates:

Standard rate for the first night

  - Single or double occupancy: $98
  - Triple: $117
  - Quad: $140

Standard rate for consecutive nights

  - Single or double occupancy: $73
  - Triple: $92
  - Quad: $115

Other CSUN housing resources include:

- First home buyer seminar
- Relocation Services
- Community Resources
- List of private housing resources

Cal State University Monterey Bay (CSUMB)

CSUMB provides its faculty and staff with two convenient and affordable housing options on campus: rental units and homes for purchase via a ground-lease plan.

For rental units, CSUMB has 1,253 housing units within two miles east of the main campus. This residential area includes three sections: Frederick Park (CSUMB student apartment housing), Schoonover Park I and Schoonover Park II. Schoonover Park I consists of six hundreds 2- and 3-bedroom units. The 2-bedroom apartments are available for rent to CSUMB employees and other employees from certain institutions (known as Educational Partners). Schoonover Park II includes eighty-seven two and three-bedroom rental units for CSUMB staff and faculty only. Residents in these apartments are responsible for the utilities including water, sewer, electricity, and gas.

Housing for sale is offered by CSUMB Employee Housing, Inc. (CEHI) program, established to help staff and faculty purchase a CEHI home on a ground lease basis at affordable prices. The program offers eight spacious floor plans ranging from two to five bedrooms detached and townhouses. The CEHI home sales program allows the homebuyer to purchase only the housing unit, while the CSU/State of California maintains ownership of the land and leases it to the homeowner. This helps to reduce the sale price by about 35 percent compared to an off-campus home. CEHI homebuyers are responsible for paying the property taxes on only the value of the home plus the usage interest in the leased land. Homeowners will also pay basic and supplemental ground Rent. The basic rent based on the purchase price of the home (Cal State Monterey Bay, 2018).

Cal State University Fullerton (CSUF)

CSUF currently offers a housing sales program for its employees and staff. In 2002, CSUF completed the University Gables, a residential community in Buena Park, CA. The project allows CSUF faculty and staff to own an affordable house close to campus. CSUF Housing Authority formed a partnership with the City of Buena Park, and Valeo Companies.

The homeowner can own the house while the land is a lease. Homeowners have to make rent payments for the land lease. To ensure that the University Gables remains an affordable housing option to the faculty and staff, CSUF imposed some restrictions regarding the resale price and ownership eligibility. Provisions of the ground lease limits the length of the lease to 99 years. Homeowners in return pay rent for the use of the land. However, they need to pay part of the rent upfront as part of the home mortgage. Future Home sales offered first to university employees. Other requirements include the fact that CSUF may have the option of rebuying the house if the homeowner does not maintain it as his residence or is no longer working at CSUF (Fullerton, 2018).

The housing project at CSUF has buyer income restrictions as a condition for obtaining the land from the City of Buena Park. This implies that the buyer's income should not be more that 120% of Orange County median income (based on the household size). The City also requires home to be sold to low income group making about 80% of Orange County's family income.

A second housing project to promote affordable housing at CSUF is the University Heights project, consisting of forty-two townhomes near downtown. However, this project was not as successful as the University Gable's experience. The project included an arrangement between the Elks and the housing authority, whereby Elks provides about three acres of land for the new homes in return for funds from the university housing authority. Fifteen faculty members currently own homes in the 42-townhome property approved by the council in 2005 and completed in 2008. Renters occupy the remaining 27 residences.

Homes are not subsidized but priced below market value on a ground-lease basis, with restrictions on re-sales to maintain the homes' affordability. Selling prices are about $150,000 – $200,000 below the cost of comparable new homes in the Fullerton housing market to offer an attractive housing product for faculty recruitment. (Orange County Business Council, 2018).

The townhomes were sold below market value in 2007 and 2008, for $475,000 to $583,000. However, due to the recent housing market crash, the homes decreased in value to reach about $400,000 and the university expected to take about a $4.3 million loss. The housing authority suffered from $455,283 loss in 2012 on University Heights and about $732,471 loss in 2013, followed by an $883,879 in 2014. As the University could not sell most of the homes, it rented them instead (Orange County Register, 2013).

In May 2013, Fullerton City Council members approved a request from the CSUF Housing Authority to remove the restriction regarding home ownership in the University Heights (reserved to CSUF faculty and staff). The university was negotiating with a private company to sell off the property and had $15.2 million in debt because of its inability to sell all the homes to CSUF employees.

Cal Poly Pomona

Cal Poly Pomona is offering its faculty and staff affordable homes with land lease from the Foundation. This reduces the costs and help faculty and staff own a new home near campus. Homeowners are required to make rent payments for the lease of the land that is subject to certain restrictions. These restrictions include limiting the resale price to ensure affordability and continuing ownership eligibility; thus, lengthen the time required for selling a home. In addition, faculty/staff housing program should occupy these homes as their primary residence. Cal Poly Pomona provides housing assistance programs including providing data regarding relocation and local affordable community housing to new faculty members and staff.

In 2004, Cal Poly Pomona Foundation started buying and remodeling single-family homes in a nearby residential neighborhood. The number of the purchased homes has reached seventeen ranging in size from 1,100 – 1,500 square feet and consist of 3 to 4 bedrooms built in the mid 1950's and are within walking-distance to Cal Poly Pomona (Fair Oaks Walk, 2019).

In 2007, the Cal Poly Pomona Foundation has purchased 34 new townhomes Fair Oaks Walk in Pomona with three bedrooms ranging from 1,500 – 1,700 square feet with 2-car attached garages and a small common area park. Cal Poly Pomona sold out all these homes (Fair Oaks Walk, 2019).

Cal Poly Pomona Foundation provides also a Faculty/Staff Homebuyer Assistance Program (FSHAP) to purchase a home in the Foundation's Housing Assistance Program inventory (currently Kellogg Tract homes and Fair Oaks Walk homes). FSHAP makes housing more affordable by providing financial assistance for the down payment needed to qualify for a loan, thus avoiding the cost of private mortgage insurance and higher financing costs.

The maximum loan is the smallest of either 20% of the property's price to be financed or $70,000. The borrower needs to finance at least 2% of the purchase price and pay all costs related to the primary mortgage, the FSHAP loan, and the closing costs.

FSHAP loan consists of two options. The first option entails no principal or interest payments until maturity (after the first mortgage are paid off and the homeowner can refinance the FSHAP loan with other lender). The second option includes interest only payments, or fully amortized payments of interest and principal.

California State University Channel Islands (CSUCI)

University Glen, a residential community of single-family homes, townhomes, and apartments, is located adjacent to the California State University Channel Islands campus. It is less than eight miles from town center of Camarillo, California.

The residential community offers affordable housing to attract faculty and staff to campus since 2002. Currently, the goal remains the same and implemented via the Faculty Staff 100 Program that includes 100 subsidized rental apartment units to eligible staff and faculty (professional staff and full time auxiliary employees) in the Mission Hills Apartment Homes complex in University Glen. In addition, the total residential complex currently includes 2000 residents (staff and faculty, educational and military partners, alumni and public). The program benefits include rental units at least 5% below market rate, no credit check neither application fee required upon application (University Glen, 2017).

Mission Hills housing development (adjacent to CSUCI) include one, two, and three bedroom rental apartments for rent. CSUCI subsidizes the rent at 5% below the market rate, and there is no credit check or application fee required. Mission Hills include a large park, tot lot, dog park, basketball court, pools/spas, and gym (Mission Hills, 2019).

The University Town Center at CSUCI includes restaurants, shopping and businesses for the campus and University Glen community. This includes Town Center Market, Pizza 3.14, Tortilla's Grill and Cantina, Bookstore, Copy Center, Community Center, the Mission Hills Leasing Center; as well as, the University Glen CAM Manager's office. Community Pools and Fitness Centers are available for the residential community; in addition to Tot Lot, community garden, Dog Park, Sports Park, and basketball court (University Glen, 2018).

The land for University Glen is ground leased for 99 years by the California State University to a government agency (Site Authority) which is the developer of the project. The Site Authority (SA) retains the title of the land and delegates land use and development matters in this area to implement faculty and staff ownership housing Program at CSUCI. The SA will retain title to all of the land.

Owners of detached and attached units are responsible for all maintenance, repair and replacement (no matter the cause, such as fire, earthquake, wind, rain, etc.), inside and outside. However, all maintenance, replacement and repairs (no matter the cause) to the structural components, the roof and the exterior will be conducted by the SA as well as common area landscaping and recreational amenities; exterior maintenance of the attached units.

If a homeowner decides to sell his property, the SA determines the Maximum Resale Price ("MRP". A one percent (1%) Transfer Fee is payable to SA at the time of closing in addition to an administrative fee of $750 (University Glen, 2018).

During spring 2017, the CSUCI SA started the second phase of real estate development for University Glen. This includes 32-acre expansion of CSUCI's residential community including 600-unit project that consists of 310 apartments, 170 senior age-restricted units and 120 for-sale town houses and single-family homes. New amenities provided include a clubhouse, pool and other multi-use spaces. To implement this phase, CSUCI has collaborated with Kennedy Wilson, a global real estate investment company, which acquired the lease to the University Glen community and the adjacent Town Center in Aug. 2016 for $81 million. The agreement helps CSUCI to implement the campus expansion (University Glen, 2018).

Eligible homeowners must buy the homes as primary residence. Priority categories, per the Ground Sublease, of persons eligible to purchase in University Glen include CSU employees joining CSUCI during the summer or fall of 2002 selected by the CSUCI President (Category 1), tenured and tenure-track Faculty and CSUCI Management Level III or IV Personnel (Category 2). Other eligible members include Full-Time Staff of CSUCI (category 3), employees of Educational Allies, Educational Partners, and officers of Military Partners(category4), tenured and tenure-track faculty and Full-Time Staff of any other CSU campus(category 5), graduates from any CSU campus (category 6), and the public (Category 7).

(University Glen, 2018).

Cal State University San Francisco (CSUSF)

CSUSF provides different rental housing options available to faculty and staff at the University Park North, which is situated on 24 acres adjacent to the Stones town Galleria Shopping Center. It provides unfurnished one, two, and three apartments to faculty, staff, and students with families. The property is overlooking Lake Merced and the Pacific Ocean, and very close to CSUSF main campus. The apartments include large living and dining rooms and include Ocean and lake views, recreation facilities, and all utilities included (University Housing services, 2018).

University Park South consists of townhouses (adjacent to CSUSF main campus) for faculty and staff and their family members. It is located across the street from Lake Merced offering recreation and leisure activities-jogging, golf, tennis and close to Stones town Galleria Shopping Center and public transportation and San Francisco State University's free shuttle to campus. The University Property Management. Manage the apartments (owned by San Francisco State University). All town homes have large living and dining rooms (University Housing Services, 2018).

San Jose State University (SJSU)

SJSU provides its faculty, Staff, Graduate Students, Senior, and Junior Students with on campus housing for rent: Campus Village Building A (CVA) within walking distance to campus. SJSU charges $50 nonrefundable application fee and $600 initial housing payment Faculty and staff units are located only on the sixth, seventh & eighth floors of CVA. The Campus Village includes different restaurants and offers cable television, a high-speed internet connection. The Resident Activity Center (RAC) offers a gaming area with air hockey, ping pong, pool and four meeting rooms. While located in Campus Village, the RAC is open to residents from all buildings (University Housing Services, 2018).

SJSU has also another program for faculty housing named Faculty in Residence Apartments: Faculty in Residence are assigned to either SJSU Faculty, Professional Staff, Graduate, Senior or Junior Students. The Faculty-in-Residence program aims at connecting on-campus housing students with faculty members. The Faculty-in-Residence supports the Residential Curriculum, stimulates academic involvement, and mentors student residents. The program also supports a sense of community, social and educational activities, and the academic and community needs of the students (University Housing Services, 2018).

Cal Poly San Luis Obispo (SLO)

Cal Poly San Luis Obispo plans to build on-campus affordable housing (expected in 2019) for faculty and staff consisting of 420 condo-style apartments and retail establishment on 22 acres development within walking distance from campus to address the needs of a growing campus community. Improved walking and biking traces can help residents with alternative transportation and easy entrance to campus (Cal Poly Staff & Faculty Housing, 2018).

The project aims at recruiting faculty and staff employees who cannot afford the high cost of housing in neighboring areas. A developer can build the project, and lease the land from the university, thus generating revenue for Cal Poly. The university employees' monthly salary currently range from $1,989 to $12,552.

This can help determining the rents of the proposed new housing. Cal Poly officials already met with city and county officials to discuss their proposal. As housing is very expensive in San Luis Obispo, the housing project might have a great impact on the employees and staff who like to live closer to campus but cannot afford it.

Cal Poly San Luis Obispo hopes to offer homes for sale to employees and provide help for down payment and low interest rate loans (Cal Poly Staff &Faculty Housing, 2018).

Toward this end, the university has already completed a 69 unit condominium homes for sell at the Bella Montaña Project in 2007 to the university employees on a leased land. The home project includes ten floor plans (ranging from 2 bedroom / 1 bath homes to 3 bedroom / 3 bath homes with square footage is from 1,029 to 1,614).

It also includes different amenities such as personal courtyards, patios or decks, contemporary kitchens, elegant living areas, attractive baths and energy saving quality appointments. However, the project faced problems with occupancy due to the recession and restrictions on homeowner's resale price (Bella Montaña, n.d.).

Sonoma State University (SSU)

Sonoma State University owns ten townhouses within a 10 minute walking distance from campus to help newly hired faculty transitioning into the local community. Each townhouse is about 1300 sq. ft. and consists of three bedrooms, two and a half bathrooms, and a double car garage. They are available for a one-year lease at $1,700 per month (Sonoma State University Prospective faculty, 2014).

Sonoma State University has also purchased a $42 million apartment complex in Petaluma to provide affordable housing for different income levels faculty and staff. The California State University Board of Trustees approved the project consisting of 90-unit Marina Crossing Apartments adjacent to the Petaluma Marina.

The project aims to help in faculty retention as Sonoma State has lost about 1 in 5 candidates in their recruitment process in the past year due to the high cost of housing. The recent wildfire contributed to the already existing housing crisis in the area.

The university's purchase of the 90-unit apartment complex is the first step in overcoming employee's needs for housing. The university plans to pay for the Petaluma property with reserves and state bonds and will be owned and managed by Sonoma State's housing services office. The rental income can cover the operating cost. The new apartment complex will have five different floor plans from studios to three-bedroom apartments.

The average apartment rent will range from $2,200 to $3,500. Amenities at the Petaluma apartment community include a pet park; clubhouse; fitness room; bocce ball court; bike and kayak storage; parcel lockers; electric car-charging stations; and an outdoor lounge area with a fire pit and barbecue grills (Lukas Brown, 2018).

Cal State University San Bernardino (CSUSB)

The Faculty-in-Residence (FIR) program at Cal State San Bernardino (faculty and their families live in a residential housing on campus) attracts seven faculty members for the 2018-19 academic year. The program, which started in the 2016-17, aims at promoting stronger community, academic involvement between faculty and students (Inside CSUSB, n.d.).

San Diego State University (SDSU)

San Diego State University does not provide affordable housing but provides financial assistance in the form of $10,000 to assist first time homebuyer.

Cal State University Long Beach (CSULB)

Cal State University Long Beach has no affordable housing options for faculty/staff to be found. However, the university is in negotiations with two developers (Cliff Ratkovich and Tony Shooshani) to offer affordable housing options for faculty, staff and students ages 21 and older in the downtown area. The planned projects will be built on Third Street and Fourth Street near Long Beach Boulevard. CSULB provides relocation assistance site to help employees finding relocation resources close to the Long Beach area (Chow, 2018).

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