digital surveying methodologies

a study on and off campus in san luis obispo

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Executive Summary

Community planning is an ever-evolving process of creating thoughtful regulatory responses for the needs and concerns of the people. For planning to be successful in communities, it is imperative that it is inclusionary to citizens throughout many different demographics. These demographics may include gender, race, age, religion, income, disabilities, education, employment or location. For many of these demographic types, the traditional public-hearing methodology of public participation may be completely adequate, but for others it currently doesn’t truly invoke the public participation necessary to label our current planning outreach as inclusionary. For the purpose of this study, planning staff will be focusing on a potential modern alleviation to conducting thoughtful community outreach for the youth experience of public space through using digital surveying methodologies. The definition of “youth,” for the purpose of this study, is men and women between the ages of 18-25 years old. The predominant digital methodology the staff tested was through use of personal cell phone cameras to obtain visual inventories and qualitative data to analyze the youth experience of public space.
CHAPTER 1: BACKGROUND

Purpose and Relationship to Planning

The purpose of this study is to engage 12 college-aged participants living in 2 distinct living environments to provide both visual inventories and qualitative data for the analysis of how they experience their direct environments. This study will be a planning-oriented “PhotoVoice” project. PhotoVoice is a method of engaging in participatory action research, which enables people to identify, represent, and enhance their neighborhoods through photography. Identifiable in today’s culture are many photo-based applications of social networking, including: Instagram, Facebook, SnapChat, Twitter, and hundreds of others. These applications are used by hundreds of millions of individuals ranging in all age groups, but are particularly used by younger demographics, specifically 18-25 year olds. According to Instagram’s website, the photo-sharing application currently has over 200 million monthly active users, which together post an average of 60 million photos per day (press, instagram.com, 2014). While technological trends aren’t permanent, they may provide immediate opportunities for planning staff to connect with a demographic of residents that do not regularly participate in local planning agendas.

The City of San Luis Obispo, California carries a population that is nearly split in half between transient college students, and permanent residents. According to the United States Census Bureau, out of the 45,119 residents of the City of San Luis Obispo, 20,457 (or 45.3%) are between the ages of 15-29 years old. More specifically, 13,352 (or 29.6%) of the city’s residents are between the ages of 20-24 years old. Despite this younger demographic representing a dramatic percentage of the population, it is often exceedingly rare to find young people participating in local planning processes within the city. This theme of the “silent majority” represents a systematic failure throughout local government decision making, and engaging the youth demographic through creative, accessible, digital applications may be the first big leap in the right direction for collecting thoughtful public input.

With the concept of engaging this “silent majority” of the City of San Luis Obispo, the planning staff aimed to focus this project toward both 18-25 year old students living both on-campus and off-campus. The first living environment studied was focused throughout the off-campus neighborhood of Buena Vista Avenue, located between Grand Avenue and Loomis Street. The second living environment studied was focused within the on-campus living environments of Sierra Madre & Yosemite Halls. By studying and comparing youth that live both on and off campus in San Luis Obispo, the planning team will accomplish a series of goals. First, the team will be able to assess the effectiveness of using the PhotoVoice participatory action research as a methodology for conducting qualitative research about participants’ direct experiences with their living environments. Next, it will provide valuable planning pertinent information about two distinct individual living environments within the City of San Luis Obispo. Lastly, it will provide the planning
team with the ability to compare and contrast the experiential differences of students between the two distinct living environments. The project focuses on participants’ opinions on the neighborhood elements of safety, recreation, aesthetics, and transportation.

This report will first focus on a background study of the Buena Vista Neighborhood, giving an inventory of existing conditions within the area. It will then examine the background information of the Sierra Madre & Yosemite living environments on the campus of Cal Poly. Next it will examine the background and implementation of the digital surveying methodology used to collect visual inventories from both the living environments. Following the introduction of the study methodology, the planning team will discuss the participatory findings from participants, and follow-up conclusions of the existing characteristics of the two living environments. Lastly, the planning team will discuss the final conclusions from the study, and label differences and similarities between both of the study groups’ experiential perceptions of their living environments.

Research Study Methodology

After taking inventories of the existing characteristics of both of the study environments, the planning team felt sufficiently familiarized with the areas to begin the participant PhotoVoice study. The team identified that a total 12 youth participants were needed, with 6 participants being residents of the on-campus Sierra Madre and Yosemite living environment, and 6 participants being residents of the Buena Vista neighborhood living environment. After some discussion, the team also agreed that both study groups needed to be split in half by gender. Upon recognizing the scope of the necessary participants, outside consultation was conducted through telephone contact with Professor Krista Harper of University of Massachusetts- Amherst. Professor Harper led a PhotoVoice study of a Hungarian Romani neighborhood, and the primary focus of the consultation was to construct meaningful digital survey guideline prompts to encourage meaningful participant responses during the study. After thoroughly discussing approaches toward how to effectively direct participants, the planning team created a digital survey guideline sheet that would be given directly to participants for the purpose of the study.
The survey guidelines listed was designed to be broad enough to encourage participant discovery during the activity. Shown below is the exact guideline sheet given:

**Digital Survey Guidelines**

**Target Number of Photographs:** 8

**Directly message pictures to (831) 334-2027 or jsammet@calpoly.edu**

- 2 Photographs on safety
- 2 Photographs on recreation
- 2 Photographs on aesthetics
- 2 Photographs on transportation

**Safety**
- Take one picture of places or environmental features that make you feel safe.
- Take one picture of places or environmental features that make you not feel safe.

**Recreation**
- Take one picture of public places that you find fun and recreational.
- Take one picture of public places that you do not find to be fun or recreational.

**Aesthetics**
- Take one picture of places or environmental features that you find to be aesthetically pleasing or attractive.
- Take one picture of places or environmental features that you find to be blighted or unattractive.

**Transportation**
- Take one picture of places or environmental features that contribute to your desire or ability to travel.
- Take one picture of places or environmental features that negatively affect your ability or desire to travel.

**PhotoVoice Participant Selection**

The planning team carefully considered the process of which study participants would be selected. For the Buena Vista neighborhood, study participants were selected based on the planning team’s outreach from within Buena Vista Park. Potential participants were approached and asked if they would be interested in giving assistance for a digital neighborhood study. After retrieving the level of interest of the potential participants, planning staff discovered their age
(and eligibility for the study), and whether they had access to share photos with the planning team. The criteria for participant selection was based on whether the individual was between the ages of 18-25, whether the individual lived within the boundaries of the study environment, and whether the individual had access to a phone that could send photographs. If study participants passed the criteria requirements, phone numbers were exchanged, and participants received a physical copy of the digital survey guidelines shown in (image reference). The exact same measures were used with regards to the On-Campus Sierra Madre & Yosemite Living Environments, except that the staff efforts where conducted towards individuals travelling to and from the VG Café residential dining facility.

After individuals agreed to participate in the study, phone numbers were exchanged, and participants directly text messaged photographs taken from their experiences with the public spaces within their living environments.

Case Studies:

**PhotoVoice**

Also known as “participatory photography,” PhotoVoice was created in 1998 by Anna Blackman and Tiffany Fairey while both were studying at Edinburgh University. PhotoVoice’s mission is to promote “using innovative participatory photography and digital storytelling methods as a means for communities to represent themselves and create tools for advocacy and communications to achieve positive social change. (vision & mission, photovoice.org)” PhotoVoice’s methodology builds on the potential of photography as a flexible and evidential tool that can be accessible, influential, and communicative.

**LOOKOUT UK – Amplifying the Voices of Young People in the UK**

The planning team was immediately interested in the LOOKOUT UK PhotoVoice project because it was directly aimed at retrieving the perspectives of people under 25 years old living in the United Kingdom. The project was focused around the predominant paradigm of how older demographics debate “youth issues” without truly gaining insight from the youth demographic itself. In many ways, this type of construct seems similar to what exists in the City of San Luis Obispo, as the older and less populated demographics continuously establish policies and ordinances, such as noise ordinances and social gathering limitations, that are directly aimed at the younger (and majority) youth population. Lookout acts directly as a broad platform for “young people to highlight their perspectives on any issues they feel are important, and which are overlooked by politicians, and ignored or misrepresented by the media” (project background, lookou0.wix.com, 2013). The project has been continuous since 2010, and calls for youth to submit captioned photos, or attend youth conferences in cities throughout the United Kingdom.

This project used the PhotoVoice methodology to generate knowledge and documentation related to environmental injustices faced by Roma in Hungary. By integrating community members to conduct participatory visual research, members of the Roma neighborhood were able to involve themselves in a matter of visual discussion that crosses the barriers of language, race, and education. When presenting evidence, a picture of trash floating down their adjacent neighborhood stream was able to create more of an impact than verbalizing the situation alone.
CHAPTER 2: BACKGROUND OF LIVING ENVIRONMENTS

Buena Vista Living Environment

Introduction

The Buena Vista Neighborhood is focalized around the oval-shaped Buena Vista Park located on Buena Vista Avenue. The neighborhood consists of multiple public parks and sloped streets. Nestled just off the campus of Cal Poly, the neighborhood area seems to be almost split in half between family residents and college student renters. This vibrant mix in demographics offers residents a truly unique foundation to experience their daily lives in cohabitation. The reason that the Buena Vista Neighborhood was focused on for this study is because it represents a true inverse to the more-dense student life that exists on campus.

Maps of Neighborhood
Existing Conditions

The Buena Vista neighborhood supports three identifiable, main border-streets that enclose the identity of the neighborhood area. These streets include Grand Avenue, Loomis Street, and Slack Street. Grand Avenue borders the neighborhood to the west and currently provides the neighborhood with direct navigable access to the campus of Cal Poly, as well as the lower Monterey Street Corridor towards downtown. Loomis Street borders the neighborhood toward the south, and separates the neighborhood from Highway 101. Slack Street acts as the northern bordering street to the neighborhood, and directly separates the neighborhood from the Cal Poly campus.

Staff Inventories:

Recreation

There are multiple areas providing recreational space within the Buena Vista neighborhood. Two public parks serve the residential neighborhood, these include: Buena Vista Park, and Cuesta Park. Both parks allow visitors to bring dogs and have open space. Cuesta Park has multiple children’s play construction areas and barbeque pits.

Safety

The research team made the preliminary analysis that the neighborhood has various elements that affect safety. These elements include legible street signage, two streets with sidewalk, sporadic street lighting fixtures, and pedestrian crosswalks exclusively on Grand Avenue. Buena Vista Park supports one neighborhood watch sign that suggests that residents are monitoring suspicious activity collectively.
Transportation

With respect to transportation, the majority of Buena Vista neighborhood supports a grid pattern urban layout, which allows direct access to the various streets within the neighborhood. Grand Avenue acts as a major gateway street to the Cal Poly campus, and has clearly defined bike paths, and pedestrian sidewalks. In addition, there are multiple bus stops along Grand Street that allow for residents to travel around San Luis Obispo without the need of a car. Almost all of the internal streets within the neighborhood do not support sidewalk infrastructure, leaving pedestrians forced to walk on the street besides cars and cyclists. Very few decipherable crosswalks exist within the neighborhood.

Aesthetics

The planning team found existing environmental aesthetics to be abundant to residents throughout the Buena Vista neighborhood. Due to the sloped grading of the environment, as well as predominant single-story characteristics of development, plentiful views of both the Bishops Peak and Madonna Morros are plentiful. Various streets in the neighborhood have poor road infrastructure. Slack Street specifically presents a seemingly degraded street infrastructure that is not attractive. Bordering Slack Street is a vast field of grass that supports Horses and livestock. The staff believes that this fielded area represents a beneficial asset to the aesthetic characteristics of the neighborhood.

Sierra Madre & Yosemite Living Environment

Introduction

The Sierra Madre & Yosemite living environment is primarily a first-year student dormitory environment consisting of nearly 1,500 students between two complexes. The living environment offers student residents the unique opportunity of living in a dense, exciting, and youth focalized micro-community within the vast campus of Cal Poly. It is evident that substantial efforts have been made to give first-year students a holistic living experience that combines elements of safety, travel, recreation, and aesthetics. However, it is not significantly known how effective these efforts have actually translated to benefit the lives of the living environment’s student residents. Unlike the other dormitory communities on
campus, the Sierra Madre & Yosemite living community identifies itself as a “Connections Learning Community.” What the Connections Learning Community focuses on is creating a living environment that intermixes an array of students within different majors and academic pursuits. Ultimately, the student experience within the Sierra Madre & Yosemite living environment promotes an eclectic mixture of students that create friendships across the boundaries of academic majors and colleges.

Maps of Living Environment

Existing Conditions

The Sierra Madre & Yosemite living environment supports two identifiable, main border-streets that enclose the identity of the neighborhood area. These streets are Grand Avenue, and Deer Road. Grand Avenue borders the community to the west and currently provides direct navigable access deeper into the campus of Cal Poly, as well as the lower Monterey Street Corridor towards downtown. Deer Road is located behind the living environment to the east, and is largely used for pedestrian and bicycle access and less for vehicle transportation.

Staff Inventories

Recreation

Sierra Madre & Yosemite Hall
On-Campus Living Environment
Despite the Sierra Madre & Yosemite living environments close proximity to the Cal Poly Recreation Center, it supports an immense array of on-site recreational settings. Within the confines of the dormitory areas alone, there are two full beach volleyball courts, two full basketball courts, four half-basketball courts, two indoor community centers, two large-scale picnic tabled settings, and six outdoor barbeque pits. However, after conducting brief walkthroughs, the planning team found that residents vastly under utilized nearly all of these areas.

Safety

The research team examined the existing elements within the Sierra Madre & Yosemite living environment that promote perceptions of safety. There are some existing night lighting fixtures located throughout the living environment, however at night, a large majority of pedestrian walkways remain completely unlit. In addition, there are areas throughout the perimeters of the dormitories that are experiencing substantial construction work, and are not adequately blocked off to community residents.

Transportation

Clear and legible bike paths and pedestrian walkways connect the Sierra Madre & Yosemite living environment to the center of campus. Due to the somewhat restrictive access of Deer Road, it presents a navigable and safe pedestrian and bicycle roadway to directly link the living environment’s residents to their daily destinations, such as: VG Café, the University Union, Kennedy Library, and the Recreation Center.

Aesthetics

The living environment is nestled in a location that provides ample views of the San Luis Obispo mountainous horizon. From nearly every location throughout the Sierra Madre & Yosemite living environment, clear views exist of Bishop’s Peak and Mount Madonna. In addition to the existing viewsheds, the community borders a large meadow holding horses and open space. Directly behind the living environment to the east are a series of beautiful rolling hills. One of the adjacent hills has maintained a large painted “P” on it.
CHAPTER 3: PHOTOVOICE STUDY RESULTS

Introduction

This chapter contains participants’ pictures and summaries of elements of safety, recreation, aesthetics, and transportation. The pictures identify specific locations existing within the participant’s living environment that both positively contribute to their perceptions of the various elements, as well as damage participant's perception of the various elements. The planning team believes that each photograph is deserving of being summarized because each participant represents an individualized perspective on the various elements. The first set of participant responses that will be focused on is the Buena Vista neighborhood group, with the Sierra Madre/Yosemite participant group following after.

Buena Vista Neighborhood Results

Participant 1 – Kelsey – Aged 20, Female

Safety

Taken at the base of Buena Vista Park, the participant identified that clear neighborhood watch signage directly contributes to her perception of safety within the area. Kelsey noted that by having posted signage declaring that the neighborhood is working together to collectively watch for suspicious activity, it makes her feel like the neighborhood community has a vested interest directly in her ability to travel and enjoy the neighborhood streets and parks without threat of harm.

The participant identified McCollum Street to be a negative characteristic to her perception of safety within the Buena Vista neighborhood. Kelsey explained that McCollum Street is one of the two major access streets that reach Buena Vista Park (other being Loomis Street), and the street currently does not have any sidewalks. Kelsey believes that the neighborhood could improve safety if it constructed sidewalks on streets that lead to the park, because fast moving vehicular traffic is not ideal to walk next to.
Recreation

The participant identified Buena Vista Park as her epicenter for recreational activity within the neighborhood. Kelsey stated that she owns a dog, and that the park is the perfect size for her to engage in playful activities with her dog, without worrying about fast moving traffic threats.

The participant detailed that Juniper bushes occupy a significant amount of recreational space in Buena Vista Park. Kelsey noted that if these bushes were to be cut down or redesigned, the park would be able to support a significant increase in usable space.

Aesthetics

One of the participant’s favorite aesthetic characteristics of the neighborhood is the vast open space area directly adjacent to Slack Street. Kelsey described that the open space is regularly used as a grazing area for horses, and the presence of grazing animals directly contributes to the beauty of the neighborhood.
The participant described that the dead end of Hope Street is a particularly unattractive area within the Buena Vista neighborhood. She lives nearby the area, and believes that the aesthetic quality of the street would be greatly improved if the city re-landscaped the site.

**Figure 9: The dead-end area of Hope Street**

**Transportation**

The participant identified San Miguel Street to exemplify characteristics that contribute to her ability to travel on foot. Kelsey described that the street supports wide sidewalks that are adequate for pedestrian traffic. The participant believes that if more streets throughout the Buena Vista neighborhood had sidewalks, a greater number of students would choose to walk to campus rather than drive.

**Figure 10: Sidewalks on San Miguel Street**

The participant selected Slack Street as an area within the neighborhood that demonstrates poor characteristics of transportation. Kelsey described that the street is far too narrow to support two directions of vehicle traffic and additional on-street parking. Kelsey believes that Slack Street should be changed into a one-way street to contribute to safety and walkability.

**Figure 11: Two cars struggling for space on narrow Slack Street**
Participant 2 – Brandon – 25, Male

Safety

The participant described that the intersection between Buena Vista Avenue and Loomis Street exemplified characteristics that benefit perceptions of safety. Brandon described that the intersection features a visible stop sign, and legible street marking functioning to ensure that cars stop and pay attention to the road ahead. He described that many other streets in the neighborhood would benefit from similar design features at intersections.

The location at the top of Buena Vista Park was noted for having poor characteristics of safety. The participant explained that the street is particularly confusing for bicyclists because it does not support clear legibility of how bikes should travel from Buena Vista Avenue to McCollum Street. Brandon described that on multiple occasions he had been close to colliding with a moving vehicle while bicycling up Buena Vista Avenue.

Recreation

The participant identified the play structure and open space within Cuesta Park as an exemplary recreational asset within the neighborhood. Brandon described that people frequently use the open space for throwing Frisbees, playing football, and sun bathing.
The participant expressed that he did not like the plant selection existing within Buena Vista Park because it takes up usable recreational space and provides no benefit to park visitors. Brandon believes that these areas within the park should be replaced with public gardens, or more beneficial plants.

Aesthetics

The participant described that the surrounding viewshed of the San Luis Obispo hills provide an amazing aesthetic benefit to areas throughout the Buena Vista neighborhood. Brandon is thankful that the city has protected views by enforcing height limits on homes.

The participant described that the hill adjacent to Slack Street supports an unsightly water storage tank that has a negative impact on neighborhood aesthetics. Brandon believes that the city could have strategically placed the storage tank in a different location that was more visually concealed from nearby residences.
Transportation

Brandon elaborated that bike lanes on Grand Avenue are wide enough, and legible enough to support safe bicycle travel for residents living within the Buena Vista neighborhood. He described that he feels safe bicycling on Grand Avenue.

The participant described that traveling on Loomis Street to Cuesta Park feels particularly unsafe due to the lack of bike lanes, and pedestrian sidewalks. In addition, Brandon described that the road directly before Cuesta Park is quite curvy, giving both drivers and pedestrians minimal time to respond to each other.

Participant 3 – Victoria – 20, Female

Safety

Victoria described that her home is one of the main contributing aspects to her perception of safety within the Buena Vista neighborhood. The participant discussed that one of her favorite aspects of living in the Buena Vista neighborhood is the ability for her to have her own front-yard area adjacent to other neighbors and friends.
This picnic table is located at the front of Cuesta Park. The participant chose this area as a representation of a space that she deemed unsafe. Victoria noted that the lack of clear visibility, and the surrounding dense vegetation made her feel like the area made her feel unsure of what could be occurring in the area without her knowing. In addition, in the later hours of the day the area has absolutely no additional lighting fixtures to bring light into the area.

Recreation

Located in Cuesta Park, Victoria described this play structure to be one of her favorite examples of beneficial recreational space within the Buena Vista neighborhood. She described that the structure and surrounding area is very well-kept and clean, and she feel that it is a particularly strong draw to the neighborhood for families with young children.

As an appendage area of Cuesta Park, Victoria described that the empty pool represented a lost opportunity for valuable recreational space. As the Buena Vista neighborhood supports a large amount of college students, she felt that if this pool was operational it could have a significant impact on the quality of life within the area.
Aesthetics

One of the Participant’s absolute favorite aspects of the Buena Vista neighborhood is the plethora of mountain views in nearly every direction throughout the neighborhood. She described the ability to see beautiful vegetative covered mountains and hills as refreshing in her every day interactions traveling through the area.

The participant noted that a lot of streets throughout the neighborhood have unsightly disrepair with regards to infrastructure. She noted that while the streets are generally operational to cars, the discolor and abundance of foreign debris make the area look blighted and in disrepair.

Transportation

Victoria chose this picture to represent a beneficial corridor for travel. She described that the road has smooth asphalt, clear visibility, and refreshing use of vegetation to contribute to a sense of enclosure.
One of the participant's most significant observations regarding environmental features negatively impacting her ability to travel is the lack of sidewalks throughout the neighborhood. As a dog owner, she feels concerned for her dog’s safety while traveling on streets where there aren’t noted places for pedestrians to walk.

Participant 4 – Jackson – Aged 23, Male

Safety

The participant identified the neighborhood watch sign located at the base of Buena Vista Park to be a beneficial feature improving the perception of safety within the area. Jackson believes that the sign acts to remind residents within the neighborhood to look out for suspicious activity.

Located at the intersection of Highway 101 and Buena Vista Avenue, the participant believes that this area is particularly unsafe for travelers within the area. Jackson noted that the intersection does not have a stop sign, which confuses the flow of traffic from the other parts of the intersection.
Recreation

The participant identified the park benches at the base of Buena Vista Park to be his favorite characteristic of recreation within the neighborhood. Jackson explained that nearly every day he sits on the benches and watches his dog play in the park. The participant also described that the benches serve as a casual meeting point for residents in the neighborhood.

Despite being noted as scenic and refreshing, the participant believes that the sporadic trees located in Buena Vista Park hinder the recreational utility of the open space. Jackson described that he would rather have a clean and open field where residents could play soccer or other sports without having to worry about crashing into trees.

Aesthetics

The participant explained that one of his favorite aesthetic aspects within the neighborhood is the existing architectural design of homes. Jackson chose to take a picture of an attractive modernistic home on San Miguel Street as an excellent example of a home that benefits the visual experience for residents and visitors. The participant noted that many homes throughout the neighborhood have eclectic designs and it makes the neighborhood unique.
Jackson described the Chevron gas station at the corner of Buena Vista Avenue and Monterey Street as being an unaesthetic feature to the neighborhood. The participant believes that the city should focus on keep the street frontage of this area attractive, because it serves as a gateway to the downtown.

Transportation

The participant noted that posted signage, such as the legible signage directing traffic to the highway at the intersection of Buena Vista Avenue and Monterey Street, are a strength to his perception of ease of travel throughout the area. Jackson explained that having signage that clearly identifies routes makes traveling easier because visitors to the area are able to find their way around without backing up traffic.

The participant believes that the Chevron, located at the intersection of Monterey Street and Buena Vista Avenue, hinders his motivation for travelling. Jackson believes that the staggeringly expensive gas prices make it difficult for students to be able to afford to travel by car.
Participant 5 – Sarah – Aged 20, Female

Safety

Located on Santa Ynez Avenue, the participant suggested that the private video surveillance contributes to her perception of safety within the Buena Vista neighborhood. Sarah noted that she believes the Buena Vista neighborhood is very safe, but she likes the security of knowing that residents throughout the area are monitoring suspicious activity.

Sarah observed that the vehicular traffic flow from Buena Vista Avenue around Buena Vista Park is confusing and not clearly defined by signage. The participant suggested that more direct signage should be constructed to clearly tell drivers that the road supports one-way traffic in each direction. She explained that she has seen dozens of cars drive up the wrong side of the street because they were confused.

Recreation

The participant observed that many residents within the neighborhood use their front-yard areas as their predominant recreational space. Sarah described that in many houses throughout the Buena Vista area; students and families will interact with each other through barbequing, sunbathing, or partying in their front yards. As people walk through the various streets within the neighborhood, they are able to directly interact with people enjoying their yards. The
participant described that “one of the easiest times to meet people in the neighborhood is when they are hanging out in their yard.”

The participant described that the bench area at the top of Buena Vista Park is an underutilized recreational space. While it is nice to have shaded seating in the park, the participant believes that the area is in dire need of tabled seating areas where residents can sit and have lunch. Sarah suggests that the city should add in tables to these areas.

**Aesthetics**

The participant declared that her favorite aesthetic characteristic within the neighborhood is through constant viewsheds of the surrounding San Luis Obispo hills. The participant declared that she believes the surrounding hills of San Luis Obispo are a vital contribution to the experience of the area.

Located directly across from the participant’s residence, she believes that the crumbling road infrastructure is an ugly aspect of the neighborhood. She thinks that blighted roads can easily be repaired and repaved, and nicely maintained roads can really spruce up the aesthetic quality of an area.
Transportation

The participant noted that she regularly enjoys Cuesta Park, and thinks that the pedestrian bridge linking the parking lot to the open space field is an excellent enhancement to safely travel in the area. Sarah described that without circulation designs such as the Cuesta Park Bridge; visitors to the area would be susceptible to damage the natural vegetated areas that are vital to the park.

Sarah observed that the sidewalk on Grand Avenue is not sufficiently wide enough to support the amount of pedestrians that regularly use it. The pictured sidewalk is located at the very top of Grand Avenue near the entrance to the Cal Poly campus. The participant believes that pedestrians would feel more confident about walking on Grand Avenue if sidewalks were designed wider.

Participant 6 – Alex – Aged 21, Male

Safety

The participant selected the streetlight at the base of Buena Vista Park as a great characteristic of safety within the neighborhood. Alex described that the light is sufficient for providing visibility at night, and he wishes for the rest of the neighborhood to have more similar lighting fixtures.
The participant observed that Loomis Street has absolutely no lighting fixtures on the street front. Alex suggested that Loomis Street is a notably frequented street, as it directs Highway 101 traffic towards the Cal Poly campus, and he believes that safety could be better integrated through the integration of more lighting fixtures.

Recreation

The participant described that his favorite recreational feature within the neighborhood is the skateboard "half-pipe" located in the backyard of his house. Alex noted that the half-pipe functions as a semi-public recreational feature for dozens of skateboarders that reside in the Buena Vista neighborhood, and believes that the neighborhood could continue to improve if the city made strides to construct niche recreational spaces that serve a specific function.

The participant expressed that he is a big advocate for public community gardens. Located at the intersection of Buena Vista Avenue and Loomis Street is an underutilized significant amount of poorly vegetated public space. Alex suggested that the area could potentially serve as a great location for community garden plots, and could help bring more life to the area.
Aesthetics

The participant observed that beautiful viewsheds of the surrounding San Luis Obispo hills are abundant throughout the Buena Vista neighborhood. Alex believes these views to be one of the greatest aesthetic strengths of the neighborhood, and feels that being able to regularly see scenic natural features improves the disposition of residents within the area.

The participant observed this area between Highway 101 and Loomis Street, to be a characteristic that negatively affects his perception of neighborhood aesthetics. Alex explained that homeless people regularly use the vegetated buffer between the highway and the street as a sleeping area at night. The participant noted that the area has accumulated a significant amount of trash that is visible while walking and driving throughout the Loomis Street border of the neighborhood. He suggested that the City of San Luis Obispo should make an effort to create more services, and safer shelters for the homeless population within the city.

Transportation

The participant recognized the covered bus stop near the intersection of Grand Avenue and McCollum Street to be a feature that benefits his ability to travel from the Buena Vista neighborhood. The participant noted that he often will use the bus stop to travel to Cal Poly.
Taken at the intersection of Buena Vista Avenue and Loomis Street, the participant observed that there are many areas public-walking areas throughout the neighborhood that do not make sense to him. As featured in the picture, some sidewalks will just abruptly end, forcing pedestrians to share the road with fast moving vehicle traffic.

**Sierra Madre & Yosemite Living Environment Results**

**Participant 1 – Thatcher – 19, Male**

**Safety**

The participant observed this area adjacent to the Sierra Madre Community Center to exemplify beneficial characteristics of safety. Though the participant is not physically handicapped, he noted that he regularly sees students that are use the ramp with ease. Thatcher also described the railings as being contributing factors to allow people to travel safely.

Located between the Sierra Madre/Yosemite outdoor basketball court and Grand Avenue, the participant felt like the stairway is unnecessarily steep. He described the handrails as being inaccessible, and basically useless to those walking down the stairs as well. Thatcher described that if a person were to trip on one of the stairs, it would ultimately result to a significant injury.
Recreation

The participant described the basketball court area as being one of his favorite recreational areas on campus. Because the court is located between the Sierra Madre dorms and the Yosemite dorms, it allows residents from both areas to meet through playing sports. He noted that he regularly plays basketball on the court, and has met a number of good friends through the weekly pick-up games that occur there.

Located directly adjacent to the Sierra Madre Community Center, the participant believes that this area is the most underutilized recreational areas within the Sierra Madre living environment. Unlike other open areas on campus, the participant described that the “wood chip groundcover is gross, and students will go out of there way to walk around the area.” He believes that this space could potentially be incredibly useful for recreational activities due to its ideal location directly next to the Community Center.

Aesthetics:

The participant took this picture directly outside the back of his dorm tower in Sierra Madre. Thatcher described that the subtle curvature of the path, and the shading from beautiful trees directly contributes to the aesthetic character of the area. The participant noted that he believes the campus has done a good job of designing scenic paths between different predominant walking corridors throughout the Sierra Madre living environment.
The participant described this photo as an example of an ugly characteristic of the living environment. Thatcher noted that throughout campus there are many tree stumps that have not been dealt with, and it creates the landscape to appear ugly and unkempt.

Transportation:

The participant believes that the current bike path along Grand Avenue represents a community asset to bicyclists traveling to and from campus. Though he believes the bike path could be wider, and more legible, he describes that he regularly sees bicyclists riding safely on it.

The participant was confused with why there are a plethora of these metal poles separating the stairway from the Sierra Madre/Yosemite basketball courts. He noted that on several occasions he had personally collided with the poles while not paying attention, and believes that they negatively affect his ability to travel with ease throughout the area.
Participant 2 – Lauren – 19, Female

Safety

The participant identified that the clear crosswalk labeling contributes to her feelings of safety within the on-campus area. In addition, beyond the crosswalk there is a clear, and visible path that shows her route to safely travel further into the Sierra Madre living environment.

The participant identified this concrete-enclosed area to negatively affect her perception of safety within the direct environment. Lauren suggested that the height of the retaining walls make her unable to clearly identify what activities are occurring in the area, especially at night.

Recreation

Located directly behind her dorm, the participant identified the basketball court to directly contribute to the areas recreational assets. Upon discussing the picture with her, she suggested that the court “often has students playing on it, and also serves as open-space for other recreational activities such as soccer and football.”
The participant identified the public internal dorm space to not contribute to her perception of recreation. She suggested that the layout of the internal public space was awkward, and contained absolutely no resources that contribute to student interaction and fun.

Aesthetics

The participant found this bridge and open space area to be aesthetically attractive. Despite the fact that there are no maintained landscaping areas occurring in this area, Lauren suggested that the naturalness of the area serves as a constant benefit to students’ perception that they live adjacent to the natural scenic wilderness.

The participant identified this specific area attached to a Yosemite dorm tower to give off the perception of ugliness of the area. She suggested that the both the facades of the dorm towers represent “bland, cement buildings” and that the fencing off of public spaces without descriptions about why, made the area feel blighted.
Transportation

The participant described Deer Road as her favorite example of a site in her environment that directly contributes to her ability to travel to and from her living environment. Lauren suggested that the road is well maintained, clearly visible, and is rarely used by fast-moving vehicular traffic.

Lauren described her dissatisfaction with the area in front of Sierra Madre tower 4 with a passion. The participant suggested that students regular “hop over the fence” because it represents the quickest common route to both the dining areas and center of campus. She suggested that the fencing often inhibits students ability to easily travel throughout the area, and also is commonly a setting for injury as students trip and fall while trying to travel over the fence.

Participant 3 – Jenna – 19, Female

Safety

The participant identified the grass-filled seating area beside the outdoor basketball courts to contribute to her perception of safety. She discussed that despite the fact that the design features do not directly contribute to factors of environmental safety, something about the “green openness” of the area contributes to her feelings of safety in the immediate area.
Jenna described this area that is located directly next the Cal Poly Performing Arts Center as being a location that makes her feel unsafe. She noted that it does not support adequate lighting, especially at night, and it also is next to a significant sloping hill that could be potentially dangerous to bicyclists in specific.

Recreation

While the participant noted that she does not regularly play basketball, she described the Sierra Madre/Yosemite outdoor basketball court as her favorite recreational space directly within the living environment. Jenna described the area as a significant meeting point for friends that live within the various towers, and also suggested that people regularly interact and sunbathe on the seating directly adjacent to the court.

Jenna described this area behind the Yosemite towers as a failed recreational space. She believes that the picnic area carries significant potential as a community benefit, but the lack of use and awkward design has left the area consistently under-utilized. The participant noted that she has never seen anyone occupy the tables throughout her full year residing within the living environment.
Aesthetics

The participant chose to note the views of Bishops Peak as one of her favorite aesthetic features existing within the Sierra Madre/Yosemite living environment. She described that the views existing with the area are better than those nearly everywhere else in San Luis Obispo.

While the participant acknowledged that there are periodic needs for construction within the area, she suggested that the way campus encloses work areas is particularly unattractive. She revealed that this particular work area has been untouched for months, and it directly inhibits her ability to easily travel and use community assets such as the bike structure. She also noted that she lives in a room that looks directly down on the work area and it has been an unattractive aspect of her daily life.

Transportation

One of the participant’s favorite aspects of the campus environment is the special focus on non-vehicular transportation corridors. The picture above shows a neatly designed pedestrian-only walkway next to a bicycle-only path. Jenna directly observed that there are even painted crosswalks for pedestrians traveling across the bike path.
The participant described the University Union plaza as a great place to socialize and people-watch, however she did not like the design of the stairs throughout the plaza area. Jenna described that during peak usage hours, students are herded down narrow stairways that are located in areas that are not ideal to quickly reach the community assets such as the University Union, and the various on-campus dining buildings.

Participant 4 – Sev – Aged 19, Male

Safety

The participant described that the lighting fixtures behind the Yosemite dorms directly contributes to his perception of safety within the area. He said that the light are nicely designed, and work well at night.

Located near the Performing Arts Center, Sev described that a lot of bicyclists use this trail off the sidewalk to avoid crashing into pedestrians. He described that directly next to this bike route is a steep 20ft slope that could be dangerous if a bicyclist were to accidentally ride off the path.
Recreation

Located just beyond the parking lot across from the Yosemite dorm, the Cal Poly track represents one of the participant’s favorite recreational areas on campus. Sev described that the track is well groomed, and safe to run on, and the field in the middle of the track is one of his favorite places to throw the Frisbee with his friends.

The participant described that the basketball court to the rear of the Yosemite dorms is unnecessary, and underutilized. Sev believes that there are too many basketball courts located within the Sierra Madre/Yosemite area, and that the space could be better used in other ways.

Aesthetics

The participant’s favorite aesthetic feature within the area is the hill with the “Poly P.” Sev described it as a great place-making feature, and a cool example of campus identity within the greater City of San Luis Obispo.
The participant chose to take this picture because it represents a theme that hurts the attractiveness of the greater Sierra Madre/Yosemite living environment. Sev believes that there are too many construction projects within the area that are not finished within a quick time frame. Walking from his dorm to campus, he often has to walk around fenced off construction areas that are both ugly and inconvenient.

![Figure 81: Ugly ongoing construction site](image)

**Transportation**

The participant believes that the Sierra Madre/Yosemite living environment has done a tremendous job at providing attractive covered bike parking locations throughout the area. Sev described that he likes to bike, and having a safe place to lock up his bike has been really important for him throughout the year.

![Figure 82: Covered bike parking next to Yosemite dorm](image)

The participant described that he regularly has to cross this bridge behind his Yosemite dorm tower in order to access the greater campus area. Sev noted that every time he rides his bike to class he is forced to walk it across the bridge due to the narrowness of the handrails. He believes that this is a environmental feature that consistently inhibits his ease of travel.

![Figure 83: Bridge that is not bike friendly](image)
Participant 5 – Marissa – Aged 18, Female

Safety

The participant identified this street light fixture directly across from the Cal Poly Kennedy Library to characterize a beneficial example of safety. Marissa explained that lights like this are necessary for students to be able to see their environment when travelling back from nighttime studying at the library.

This lighting feature, located near Cal Poly’s Mott Athletic Center, is recognized as insufficient with regards to promoting a perception of safety on campus. The participant explained that the fixture provides nearly no light on the walkway during the evening hours. Marissa believes that Cal Poly could improve on using lighting amenities that are more functional for clearly exposing walk paths.

Recreation

The participant described that the sand volleyball courts behind the Sierra Madre dorm towers are her favorite example of functional recreational areas within the living environment. She noted that she has enjoyed playing volleyball throughout her life, and felt fortunate to have this resource nearby to her dorm. The participant also described that the volleyball court has timed lighting fixtures that allow students to play at night.
The participant explained that the pocket park area across the street from the Cal Poly Kennedy Library is an underutilized recreational space that does not seem to contribute to the characteristic of recreation on campus. Marissa described that she has never seen anyone use this area during her first year at Cal Poly, and believes that the reconsideration of this space could result in more recreational opportunities for students on campus.

**Aesthetics**

The participant noted that some architectural structures at Cal Poly, such as the Performing Arts Center (PAC), contribute to benefit the aesthetic characteristics of living on campus. Marissa noted that she has rarely been in the PAC, but enjoys looking at it everyday when she walks to her classes. In addition, she believes that the line of palm trees along the sidewalk provide visual benefits as well.

One of the participant’s main issues with campus aesthetics is focused around crumbling infrastructure. The parking lot areas across the street from the Sierra Madre dorms on campus are particularly in need of repair. Marissa said that the untidiness of the roads and cement slopes make her feel like the campus is gradually becoming more blighted. She believes that if more repairs were made on campus to crumbling cement, the campus would feel “more complete.”
Transportation

This arterial pedestrian/bike only path located in the center of campus was noted as a contributing factor to the participant’s desire to want to bicycle. She noted that bicyclists almost always safely frequent the arterial bike path, and there is clear legibility as to where exactly bicyclists are supposed to travel. She feels that more bicycle/pedestrian only corridors will contribute to the liveliness of campus.

The participant identified that there are hundreds of student-made bike paths throughout the landscaping around Cal Poly. Marissa exemplified the path created in front of the Sequoia dorm to exemplify a place where campus failed to thoughtfully consider how students travel. The participant believes that design changes in the landscape can be used to make evidenced unintended pathways more safe and usable.

Participant 6 – Cameron – Aged 19, Male

Safety

The participant identified this obelisk located adjacent to the University Union Plaza as a contributing factor to his perception of safety. The obelisk serves a reminder to students that sexual assault is not tolerated by Cal Poly, and serves a unifying symbol to give students the mindset that the student body as a collective interest in creating safe environment for all students.
The participant identified that there has been an existing mysterious fluid coming out of a drain along the sidewalk of Grand Avenue directly in front of Sierra Madre dorms. Despite the fact that he believes the stain to be harmless paint, Cameron believes that the fluid may contribute to perceptions of the area not feeling safe.

Recreation

As a regular basketball player, Cameron finds the Sierra Madre/Yosemite basketball court to be his favorite recreational area within the living environment. The participant explained that the court is regularly frequented, and supports the ideal smooth asphalt required to play outdoor basketball games.

The participant suggested that there are multiple large-scale cement enclosures located throughout the Sierra Madre dorm area that are completely unused by students. Cameron noted that the areas could potentially serve as excellent areas for picnic tables or other recreational settings for dorm residents.
Aesthetics

The participant identified the public art sculpture directly behind the Performing Arts Center to be an excellent existing aesthetic characteristic on campus. Cameron, an art student, believes that many areas on the Cal Poly campus could be greatly improved by integrating more public art.

The participant identified the utility boxes in front of VG Café, as an example of unattractive environmental features within the Sierra Madre/Yosemite living environment. Cameron suggested the idea of letting Cal Poly art students paint the existing bland utility boxes, and add artistic character throughout campus.

Transportation

The participant identified the covered bus stop in front of the Performing Arts Center to characterize a feature that contributes to his desire to travel. Cameron noted that he uses the same bus stop to regular travel to and from Downtown San Luis Obispo.
The participant identified an area with unsightly vegetated ground cover as a characteristic of an underutilized travel opportunity. Cameron described that many areas on campus restrict student's ability to directly travel in the quickest way possible, and he believes they could be beneficially redeveloped to allow students to travel through the areas.

Figure 99: Pedestrian path through damage vegetation
Summary of Buena Vista Neighborhood Findings

The Buena Vista neighborhood participants expressed profound enthusiasm in their responses for the PhotoVoice activity. Many of the participants expressed that they enjoy living in the neighborhood because they believe they have more access to public spaces than in other neighborhood in San Luis Obispo. Participants described that the activity was beneficial because it gave them a reason to seek out and contemplate locations throughout the neighborhood that they could better utilize. For example, one participant had never been to Cuesta Park before this activity, and now plans to regularly use the area for recreational purposes. Participants disclosed that the activity has helped them rediscover how unique the Buena Vista neighborhood is.

There were multiple specific aspects of the Buena Vista living environment that participants shared opinions on. With regards to safety within the Buena Vista neighborhood, participant results were diverse. Two of the six participants disclosed that the “neighborhood watch” sign at the base of Buena Vista Park contributed to their perception of safety. A multitude of participants believe that better lighting fixtures, and greater attention to pedestrians on roads were areas that safety could be improved upon within the area. Participant perceptions of recreation were widely focused towards the two public parks that exist in the area; these parks are Buena Vista Park and Cuesta Park. Multiple participants directly showed disfavor with the existing plant selection in Buena Vista Park because it doesn’t serve a beneficial purpose and it occupies valuable recreational space.

With respect to aesthetics, five of the six participants directly noted that the viewsheds of the San Luis Obispo hills were a valued benefit to the visual experience of the neighborhood. An agreed upon area that aesthetics could be improved was through repairing roads with crumbling infrastructure and potholes. Lastly, participants shared perceptions on aspects of the neighborhood that affect their ability and desire to travel. The most commonly agreed upon participant response was the desire for the neighborhood to incorporate more pedestrian sidewalks.

Summary of Sierra Madre/Yosemite Living Environment Findings

Many of the Sierra Madre/Yosemite participants found the photovoice activity to be enlightening with respect to how they understand the functionality of environmental features. One participant explained, “the activity made me realize that I have never really thought about how aspects of the environment are set up and used, I usually just walk around.” For all of the Sierra Madre/Yosemite participants, they left the photovoice experience with a new mindset of identifying
areas and aspects of the environment that are contributing to their experience, and aspects that can be better improved in function.

There were multiple specific aspects of the Sierra Madre/Yosemite living environment that were largely agreed upon by participants. With respect to the environmental features that affect perceptions of safety, multiple participants directly identified the importance of effective night lighting fixtures that best help promote visibility. Multiple residents explained that design features that help broaden the visibility of areas were also desirable to benefit the perception of safety throughout the area. With regards to recreation, a majority of participants directly noted their satisfaction with the Sierra Madre/Yosemite outdoor basketball court as a useful recreational space. Participants largely desire recreational spaces that serve a specific function, such as beach volleyball courts and paved running tracks.

From the perception of beneficial aesthetic areas, the participant responses were diverse. A significant amount of participants detailed their satisfaction with the existing viewsheds of the San Luis Obispo hills, particularly Bishops Peak and the Poly P. Other participants favored man-made features such as public art sculptures, and the architectural design of the Performing Arts Center. Lastly, participants gave specific responses towards environmental features that affect their desire and/or ability to travel. A predominant response from participants was that many places on campus are frequented by students but have not been designed to support travel. For example, many landscaped areas support student-made trails because students simply want the most direct route to their destinations. Participants also showed enthusiastic support for pedestrian/bicycle only roads that separate fast-moving vehicular traffic.

**Similarities and Differences Between Living Environments**

There were many opinions on features of the natural environment that were similarly shared between both the Buena Vista living environment participants and the Sierra Madre/Yosemite living environment participants. From a safety standpoint, participants in both environments directly mentioned their desire for better lighting fixtures. With respect to recreation, the two living environments differed significantly. The Sierra Madre/Yosemite participants discussed that there were so many different recreational spaces existing within their living environment that it left a lot areas underutilized. Within the Buena Vista living environment, there exist only two predominant park spaces that serve as a focalized area where the entire neighborhood convenes.

From the perspective of aesthetics, participants from both living environments agreed that viewsheds of the surrounding San Luis Obispo hills are of the utmost importance for visual aesthetics. Sierra Madre/Yosemite participants seemed to give more examples of specific places they did not find attractive, such as construction site areas. In contrast, Buena Vista neighborhood participants tended
to discuss overall themes of unattractive aesthetics within the area, such as the ongoing road infrastructure that is in disrepair. Lastly, perceptions of transportation differed in responses between the two living environments. The Sierra Madre/Yosemite participants mainly focused on very specific sites where students travel through landscaping to reach destinations, and favored the plethora of pedestrian/bicycle paths that exist throughout campus. The Buena Vista neighborhood participants discussed transportation at a larger scale. They described that the entire neighborhood supports very few existing sidewalks, and that many of the streets have very awkward transitions, such as the intersection of Buena Vista Avenue and McCollum Street.

Ultimately, participants from the Sierra Madre/Yosemite made discoveries about their environment on a more specific standpoint, looking at individual locations where improvements could be made. Inversely, the Buena Vista neighborhood participants tended to discuss general aspects of the full neighborhood that could be improved upon. This difference may be because the Sierra Madre/Yosemite participants live more densely and have more specified interactions with their living environment, whereas Buena Vista neighborhood participants largely have a significant amount of space within their homes that they fully have control over.

**Photovoice Conclusions**

For the purpose of this research, the most important aspect of the PhotoVoice study is centered around the success of being able to discover youth opinions on important elements of their public environments. The study was successful as it resulted in thoughtful participant conclusions on ways to better resolve issues that living environment residents have. Nearly every participant discussed solutions that could be used to better resolve their issues with each of the elements. For example, Sierra Madre/Yosemite participants disclosed various places that have not been successfully utilized as recreational spaces and Buena Vista participants disclosed places that have serious traffic issues. I believe that a lot of young people doubt that they can be effective in the regulatory planning process, but by letting them disclose their opinions of their neighborhood through taking pictures, it provides them with a sense that they have evidence to back the perceived problems within their living environments.


