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STEPS: Spaces Through the Eyes and Perceptions of Seniors

A Post-Pandemic Physical and Social Assessment of Open Space Use by Seniors in Rowland Heights and Hacienda Heights

A comprehensive project submitted in partial satisfaction of the requirements for the degree Master of Urban & Regional Planning

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Client: Los Angeles County Dept. of Regional Planning- East San Gabriel Valley Area Plan

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Disclaimer

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Executive Summary

Open space, defined as any open piece of land that is undeveloped, and is accessible to the public, may be particularly beneficial to seniors (defined as those aged 65+), who are often at high risk of social isolation and deteriorating physical and mental health. Despite documented benefits, seniors remain one of the most underserved groups in terms of physical activity and open space use, with opportunities being limited even further due to the COVID-19 pandemic. This report seeks to explore seniors' preferences for the design of open spaces that fulfill their physical activity and other social needs in the communities of Rowland Heights and Hacienda Heights. Methods used to obtain data included surveys, site visits to major open spaces, and digital scans of online data about public park usage during the pandemic. The findings revealed open spaces in these areas being hard to navigate on foot, parks conceived as central "pandemic" meeting places, and a high demand for open spaces in neighborhoods distant from parks. The final recommendations provide ways to transform nontraditional open spaces, defined as areas not typically utilized as open spaces, such as vacant lots and parklets, using affordable and senior-friendly elements. Specifically, findings are made replicable across different neighborhoods in the East San Gabriel Valley through 6 general themes that translate into actionable constructs: Control, Safety, Access, Social Support, Biophilic Design, Active Recreation. By providing a guideline to designing open spaces in underutilized areas within a budget, the goal is that there will be greater leverage towards creating nontraditional open spaces.

Literature Review

Introduction: COVID-19 and Open Space Use by Seniors

Open spaces, defined as any open piece of land that is undeveloped and is accessible to the public, provide a wealth of purposes for communities, such as recreational opportunities, natural respite, and social interaction. Research has shown that open space use may be particularly beneficial to seniors (defined as those aged 65+), who are often at high risk of social isolation, as well as deteriorating physical and mental health. According to the National Poll on Healthy Aging, loneliness doubled for seniors during the first few months of COVID-19 (Gavin, 2020). Feelings of social isolation coupled with loneliness and depression have severe impacts on physical health and may even cause early mortality (Loukaitou-Sideris et al., 2014). Open space-based physical activities are documented as a solution to mitigating social isolation among seniors, as they can benefit health significantly even for the oldest and most frail adults (The LIFE Study Investigators* [*See Appendix for List of LIFE Study Investigators], 2006). Despite documented benefits, however, seniors remain one of the most underserved groups when it comes to physical activity and open space use (Bedimo-Rung et al., 2005). The needs and preferences of seniors regarding open space are relatively unknown, especially about their preferences on features of the built environment, such as walkable streets, proximity to parks, and adequate lighting. The brevity of research is accompanied by the lack of park and recreational facilities that are designed with the needs of seniors in mind (Loukaitou-Sideris et al., 2016).

Old-age loneliness was already a public health issue prior to the pandemic. But issues of social isolation and physical activity only exacerbated during the early stages and onwards of the pandemic. Before the pandemic, many seniors turned to community parks or centers to maintain active social lives. Such opportunities became limited during the pandemic due to increasingly heightened anxiety/ social isolation and significantly limited opportunities to step outside one's home. Many programs and indoor recreation facilities at public parks were also closed due to health risks and potential for crowding. Seniors in particular faced many obstacles due to the higher risk of getting severely sick from COVID-19, as many faced difficulties in adhering to vigilant social distancing while accessing basic necessities, such as groceries. Open spaces such as parks may have provided a respite during these times, as they have historically played a key role in disaster recovery and resilience, especially during extreme weather events. What is not as well known is how open spaces have been utilized by vulnerable populations during air-borne epidemics such as the COVID-19 pandemic. Thus, such facts raise a question: What are the seniors' preferences for the design of open spaces that fulfill their physical activity and other social needs in a pandemic- or other disaster-related period? Are there differences faced in open space and physical activity needs when a disaster hits? The crux of this research is to assess if the infrastructure in open spaces is aligned with the true needs of senior residents in East San Gabriel Valley during the pandemic. To ensure that East San Gabriel Valley residents

remain resilient, it is critical that the region adapts and captures disaster mitigation techniques in public spaces. Understanding how open spaces may provide crucial facilities and amenities, especially in difficult periods of limited recreational opportunities, may provide important insights for future planning to accommodate senior adults.

This report's literature review provides the theoretical base and an appropriate framework for the planning of senior-friendly open space elements in Los Angeles. It examines the biopsychosocial framework utilized in public health interventions and empirical studies of open space policies. The argument is that social, epidemiological, and behavioral/environmental assessments are necessary for understanding open space use by senior adults, especially in times of ecological crises such as natural and health-related disasters. This report seeks to give rise to senior-oriented recommendations about open spaces as places that may provide better support for seniors during times requiring resilience.

Section I reviews the biopsychosocial models, by providing a social, behavioral, and ecological assessment of open space for seniors. Literature in this section frames the social, biological, and psychological benefits that seniors benefit from open space utilization.

Section II focuses on empirical studies that took place during the COVID-19 pandemic to assess open space usage by seniors during the pandemic. The procedures in these studies examine different restrictions that affect public space usage by seniors. These studies help identify ways to accommodate seniors during disasters.

Lastly, Section III covers current programs, policies, and strategies that have been developed to create more senior-friendly recreational spaces during the pandemic.

Section I: Open Space as Fulfillers of Social, Biological, and Psychological Needs

Prior to the 1940s, health was conceptualized as the absence of disease or illness. In 1946, the definition of health was expanded by the World Health Organization to include “a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity” (Bickenbach, 2015). In the context of public spaces, a wealth of literature documents the benefits of accessing spaces for seniors in terms of physical and mental wellbeing. Specifically, accessing parks or open space is positively associated with social, biological, and psychological needs for seniors. This section reveals the specific aspects and facilities of open spaces that make them accommodating to seniors.

Social: Open Space as Natural Neighborhood Networks

An abundance of literature documents the increasing risk for social isolation with age (Loukaitou-Sideris et al., 2016). Loneliness is associated with perceived stress and low social support, which are also two highly possible outcomes of COVID-19 among seniors (Heidinger & Richter, 2020). Stay-at-home orders may lead to increased feelings of loneliness, as they inevitably diminish social encounters to avoid in-person interactions, which is a significant risk factor for loneliness (Heidinger & Richter, 2020). Prolonged isolation has even been reported to have a negative impact on health, as much as smoking 15 cigarettes a day (Gavin, 2020).

Findings from multiple studies suggest that open space can help mitigate social isolation among seniors. In one observational qualitative review of seniors, parks were perceived as “third places” or naturally occurring places outside of the home or work where seniors were able to find social engagement (Gardner, 2011). Such characterization of open space as “natural neighborhood networks” indicate that they lower the risk of social isolation among seniors (Gardner, 2011). According to the National Poll on Aging, 46% of seniors who interacted with a neighborhood resident at least once a week reported less loneliness (Gavin, 2020). In another study of 226 adults, seniors who lived alone were less likely to see others in-person during the pandemic, but were more likely to be reactive to social content during the pandemic, such as safe participation in public spaces (Fingerman et al., 2021). However, seniors who live alone are not the only ones that benefit from social interactions in public spaces. A study by Brittain et al., suggests that open spaces such as parks are important social venues even for those with chronic illnesses such as dementia (2010). Another study reveals that open spaces provide networks that encourage social support and physical activity especially for those dealing in overcrowded or multigenerational households (Trachsel & Backhaus, 2011). These findings suggest that the social support gained from open space use may be beneficial for all seniors, especially in times of mandated isolation.

Biological: “Aging in Place at Neighborhood Spaces”

Survival to an old age requires resilience. A major way that seniors may maintain resilience is by adapting to their environments. However, this becomes increasingly difficult in the wake of disasters. Not only have seniors been increasingly isolated during the pandemic, but they are challenged by delayed medical appointments, leading to neglected and degenerating chronic health conditions (Portacolone et al., 2021). The act of not going outside implies less physician visits, affecting physical health. Multiple recent studies report worse health conditions among seniors. Research by Levy-Storms, et al., shows the preference of seniors to “age in place” especially within the confines of their homes (Levy-Storms et al., 2018). Loukaitou-Sideris et al. (2014) reveals how neighborhood spaces such as parks and public plazas may also be considered places that permit seniors to “age in place” in a way that promotes health. According to a study conducted in a nursing home in Finland, self-reported health was positively associated with greater outdoor visits to areas with greenery (Rappe et al., 2006). In another study conducted in Canada, seniors noted good accessibility, public safety, and ample areas of rest in parks to be of desirable characteristics of “age-friendly neighborhoods” (in Loukaitou-Sideris et al., 2014). Even for those deemed most frail, accessing open space improves physical health-especially when they invoke moods of “comfort, safety, and aesthetic” enjoyment (Loukaitou-Sideris, et al., 2014).

The biological needs of seniors have also been taken into consideration for design implications in parks. One study on senior-friendly ergonomic recommendations specifically noted the following biological changes that occurred with age: “reduction in sensory capacities and muscle strength, higher fatigue, reductions in joint mobility and flexibility” (de Oliveira Cunha et al., 2012). The recommendations from this input included greater contrasting colors on benches, graphics on signage, shorter paths, benches for social interaction, and ample shade and sunlight (de Oliveira Cunha, et al., 2012). While these were recommendations made in the context for those who do not have chronic illnesses, research shows that ergonomic features may be even more beneficial for those with at least one chronic disease (Loukaitou-Sideris et al., 2014).

“A third of the sample could not walk more than 10 yards, and only half could walk 100 yards, yet only one-third had a bus stop, one-quarter at a local park, and one-third a local shop within this distance” (Chamberlain et al., 1979).

An important marker of physical activity is proximity to the open space itself. Residing closer to open space has been linked to (1) greater leisure-time physical activity and (2) reduced development of walking difficulties (Levy-Storms et al., 2018). Research has also shown that “Zebra-crossings,” or white stripes on streets leading to open spaces such as parks are considered helpful, but having too many blocks to cross in the route to an open space invokes fear about pedestrian safety (Levy-Storms, et al., 2018). Seniors may also face limitations of their

individual physical mobility, which suggests that they may require further assistance in getting to open spaces (Loukaitou-Sideris et al., 2014).

Psychological: Security and Independence

The fulfillment of psychological needs is very important for seniors in their propensity to access open spaces. The feeling of security is one such important psychological need for seniors. One study found a positive correlation between feelings of security in neighborhood open space and quality of life (Sugiyama et al., 2009). Another study in Bulgaria noted the decrease in anxieties with increasing awareness of nature experiences (in Loukaitou-Sideris, et al., 2014). However, the COVID-19 pandemic prompted an inverse relationship between open space and security for many seniors. In a qualitative study conducted of Bay Area senior residents, conducted by UCSF researchers, feelings of being scared about the virus, long lines at grocery stores, as well as racial attacks following the death of George Floyd prompted many to stay indoors (Portacolone et al., 2021). Seniors with cognitive impairments noted feeling “trapped in their own homes”, as they were unable to seek companionship at restaurants, senior centers, churches, and neighbors (Portacolone et al., 2021).

Such research leads to another important psychological marker for seniors - perceived independence. Prior to the pandemic, many seniors were able to actively select and participate in social events held in senior centers, churches, and parks (Portacolone et al., 2021). However, such services were not available in the context of COVID-19, which decreased social interactions and opportunities to connect with the outside world. A study on senior spaces revealed seniors’ preference towards social components over the mere provision of additional open spaces, suggesting that open spaces are not a beneficial context for everyday activities if psychological needs are unmet. Otherwise, they risk a source of anxiety for seniors, especially in the case of unfamiliar environments (Levy-Storms et al., 2018).

With the needs of seniors in mind, it is also helpful to explore previously discovered elements that have been suggested by seniors for a more senior-friendly environment. According to a study done by Loukaitou-Sideris et. al (2014), a senior-friendly park is composed of 6 elements: safety and security, aesthetic natural attractions, an environment supporting social interactions, opportunities for low-impact physical activities, senior-friendly programming, and good accessibility (Levy-Storms et al., 2018). Assessing whether such values have changed as a result of the pandemic will be an integral part of understanding values for senior-friendly open spaces that are resilient to disasters.

Section II: Covid-19 Restrictions And Effect On Open Space Usage By Older Adults

The COVID-19 pandemic has demonstrated the need to build resilience in the built environment to curb infection rates while mitigating damage. Responses to such need for resilience have come about through the form of policies enacted at open spaces. This section discusses a few of the policies that emerged in open spaces as a result of the pandemic, and how they may have impacted senior populations.

COVID-19 evoked the closure of many public facilities. The pandemic oversaw many life routines moving online, such as the increased numbers of telemedicine appointments, virtual church services, and online physical recreation classes. Although recreational services were paused in the midst of the pandemic, most public parks remained open (See also Appendix A- Twitter Chart about tweets during the pandemic). With the acknowledgment that outdoor social gatherings generate decreased risk of COVID-19 transmission than indoor interactions, outdoor public spaces have become increasingly essential venues for remediating social isolation and mental health.

The impact of the pandemic on urban park visitation has been documented by several scholars. A pre- and during-pandemic assessment of urban green infrastructure use from 2018 and 2020 was conducted to better understand how green space use evolved during the pandemic (Korpilo et al., 2021). The study noted reduced utilization of urban parks in the United States, with respondents significantly reducing time spent outside of a 2-mile radius of their homes (Korpilo et al., 2021). Results of the study suggest that the primary motivations for decreased use were the desire to social-distance and engage in less non-essential activities (e.g. observing nature) (Korpilo et al., 2021). Similarly, a study based in Brisbane found that the older participants were significantly less likely than the younger participants to spend more time outdoors as a response to restrictions set in place by COVID-19 (Berdejo-Espinola et al., 2021). There are a few possible reasons why this may be. A study in New York discovered that the most common concerns about visiting urban parks were inadequate social distancing, overcrowding, and closed public restrooms/parks (Lopez et al., 2021). These results suggest that responses to stressors may vary by location, as well as individual capacity and perceived benefits and risks of utilizing open space.

Nonetheless, use of open green space is a protective trend that was documented to provide older subsets of the population with positive health during the pandemic. Accessing greenspace during the pandemic was significantly associated with lower clinical depression and composite mental health scores among seniors (Wortzel et al., 2021). Specifically, proximate tree-rich greenspace in one's neighborhood was positively associated with emotional wellbeing for

seniors, suggesting the importance of the number of trees in open spaces. Thus, the study suggests that contact with nature in open spaces assisted with coping, particularly for those who faced extreme isolation.

Given that open space use is documented as a protective factor especially during COVID-19, the maintenance of and increased accessibility to open space are particularly important for marginalized populations like seniors. More weight should then be placed to protect existing and provide new greenspaces with the needs of local communities in mind. In general, in order to obtain benefits from open space during a public health outbreak, the benefits of using the open space need to outweigh the cost.

Section III: Pandemic Design Policies: What Has Been Done During The Pandemic To Accommodate For Seniors?

One consideration in high density communities has been to provide more equitable access to urban open spaces, namely in the form of “easy access” (Lopez et al., 2021). Although East San Gabriel Valley has previously had a higher-than-average utilization of open space (i.e.- parks) per capita compared to other regions in LA County, there are regions where access may be prohibitive (County of Los Angeles Department of Parks and Recreation, 2020). A notable short term effort has been the integration of slow streets that are connected to parks and open spaces (Lopez et al., 2021). In addition, adopting consistent messaging alongside slow streets and within parks has been proven to be effective (Lopez et al., 2021; Loukaitou-Sideris et al., 2014). Standardized signage in open spaces regarding pandemic-related behavioral expectations and regulations in lay-language are visual ways of safety promotion that have eased concerns of mask use and social distancing in public (Lopez et al., 2021).

A great example of a successful slow street initiative can be found in Los Angeles, in the form of the Slow Streets Program. Established as a temporary program during the pandemic, the Slow Streets Program is documented for its effectiveness in allowing for greater social distancing and enjoyment of the outdoors. As a response to commuter street space that was not being used, the Los Angeles Slow Streets began in May 2020 to reallocate space for vehicles and discourage non-local traffic on local Slow Streets. Over 50 miles of streets across 30 different neighborhoods with “dense housing and poor access to parks” were reportedly transformed into slow streets (LADOT: Liveable Streets: People St., 2021). The program features standardized toolkits that contain methods on creating Slow Streets, including signage, gateway circles, and mini traffic circles (LADOT: Liveable Streets: People St., 2021). The feasibility of implementing Slow Streets is aided not only by the current state-level political support for a formal program, but also by the momentum of additional developments in the city that strive to increase safety and public health (Garces, 2021). A report by the Senior & Disability Workgroup of the Vision Zero Coalition analyzing the efficacy of the San Francisco Slow Streets Program - a comparable Slow Streets Program to the one in Los Angeles - found that sharing street space was still a precarious issue for seniors, as many were worried about moving out of the way for traffic on time (Haagsman, 2021). Despite, seniors noted “enjoying being able to view others” who were using the street spaces, and were inclined to use slow streets more with additional amenities such as seating and shade (Haagsman, 2021). Future research on the association between permanent slow streets to open space usage may be needed in order to see the impact that slow streets have for seniors. Yet, it is clear that measures such as standardized signage, spaces to regularly rest, and equitable participation opportunities have allowed for what was once conceived to be a temporary response to the pandemic into a permanent solution for better access to open space in general, as well as potential ways to make seniors feel safer in their neighborhoods.

The second point of consideration is designing open space for safe interaction instead of social isolation. A study in Poland on the opinions of seniors towards potential solutions in public spaces found that over 50% of respondents preferred to see signs that were verified when infrastructure was last cleaned, especially using antibacterial solutions (Fabisiak et al., 2020). Thus, cleanliness is considered a factor that may enhance safer interactions with public furniture, such as benches, play areas, restrooms, and grill/food preparation areas.

The last point of consideration is engaging in community input, particularly with seniors, to explore the accessibility, availability, and quality of open spaces. This is crucial in the long term planning of built environments that may accommodate all user types, and intentionally prioritizing green space in neighborhoods that do not have them. In the Westlake area of Los Angeles, the Golden Age Park is a successful example of a park designed with the needs of seniors in mind (Braswell, 2019). The park was informed via focus groups with seniors at the Westlake neighborhood, who expressed discomfort in going to the nearby MacArthur Park but welcomed a safe outdoor space geared towards seniors (Braswell, 2019; Loukaitou-Sideris et al., 2016). Such discussions have allowed for the development of the Golden Age Park in a way that provides senior-friendly amenities, such as raised garden beds, low-impact exercise machines, and ample rest areas designed for safe socializing under the shade (Braswell, 2019; Loukaitou-Sideris et al., 2016). Utilizing County-wide resources to develop action plans has been found to be helpful in reinforcing such priorities. A new initiative in San Diego, titled “Age Friendly San Diego” utilized surveys conducted during the pandemic in five languages (English, Chinese, Tagalog, Spanish, and Vietnamese) and listening sessions to gather aging-related community input from diverse populations (City of San Diego, 2021). Goals that were listed in the report included prioritizing funding for age-friendly current and future facilities as well as expanding upon recreational activities for seniors. Using methods that are guided by County projects and external partnerships provide a means to bridging knowledge gaps about the needs of aging populations.

Conclusion

Gaps in the Literature

There is a wealth of literature that documents the importance of open space access as it relates to seniors, along with crucial studies that have assessed the use of open space by the population during the pandemic. Yet, the knowledge comes with several gaps and limitations. Firstly, most studies surveying seniors in relation to neighborhood open spaces survey those who attend parks and greenspaces. Doing so invokes selection bias, as the survey omits those who do not visit those spaces. Secondly, there is a lack of understanding of the variabilities and complexities in use among different user groups. The studies on open spaces conducted during the pandemic point to the conclusion that outdoor recreation depends on user, activity type, and urban density structure, with little acknowledgment towards different senior groups. In doing so, much of the literature does not capture the range of diversity when it comes to seniors, such as ethnicity and disability. Thirdly, although short term recommendations for communities have been documented in the literature, little is written about the long-term implications of equitable access for underserved populations. Moreover, the findings and recommendations suggest very general recommendations regarding the development of senior-friendly open spaces during public health crises. Thus, this report seeks to provide insight into these gaps by revealing specific open space programs and long-term infrastructure needs of seniors. Doing so will provide crucial insight into meeting the needs and preferences of a diverse range of multiethnic seniors, in open space design.

Research Design and Methodology

Research Context

East San Gabriel Valley (ESGV) contains 24 unincorporated communities which comprise about 25% of the area. As a result, an Area Plan that is specific to the land use and policy issues of East San Gabriel Valley is currently being drafted by the County, with the hopes to serve as a foundation for all community-based and land use plans. The ultimate intent is that it will help guide growth and development for the unincorporated areas specifically.

The vision for STEPS is to create recommendations that align with the Los Angeles County General Plan while highlighting the priorities and providing fruitful recommendations for the East San Gabriel Valley Area Plan. Specifically, it will establish goals and priorities for a vulnerable population (older adults) within two unincorporated areas in the 4th District: Hacienda Heights and Rowland Heights - two communities that have high densities of older adult populations (defined as aged 65 and older). Given that many ESGV residents are also of Asian (majority Chinese or Korean) and Hispanic descent, the project captures responses that are historically underreported in the community. This is being ensured through the provision of culturally appropriate materials, such as the translated use of validated survey materials and culturally appropriate questions, within the research design and data collection process.

In a time when the pandemic has exacerbated loneliness and limited access to open spaces (defined as plazas, pathways, pocket parks, parks), STEPS aims to understand what is likely to encourage seniors to utilize open spaces, while fostering a deeper sense of safety and unity within the unincorporated communities.

Research Design

The research design is three-fold: social media scans, site visits, and survey dissemination. The next section discusses each in more detail.

Social Media Scans

Social media scans were conducted using Netlytic (a social media text and networks data analyzer) to track public opinions in Peter F. Schabarum Park and Pathfinder Regional Park, two widely used open spaces in Hacienda Heights and Rowland Heights, respectively (Appendix A). The social media scan collected data of public posts on Twitter from March, 2020 (the height of the pandemic) to December, 2021 (Appendix A). Keywords assessed included: “Peter F. Schabarum Park, Pathfinder Regional Park, Hacienda Heights (HH) Plaza/Park/Pathway/Trail”, Rowland Heights (RH) Plaza/Park/Pathway/Trail”. Rationale: Given the quarantine and stay at home orders imposed during the peak of the pandemic, many turned to parks for recreation and respite. In particular, one discovery has been a high appreciation for trail accessibility during the pandemic. As such, analyzing the use of open spaces during the pandemic provides a deeper

insight into community spaces during a time of facility closures at large. Weaknesses: Although Netlytic can restrict responses by geolocation (posted in the ESGV region only), it is challenging to decipher if the keywords are targeting the residents who actually live in the ESGV, or even seniors, who are less likely than younger adults in general to use social media. In addition, it is debatable as to whether or not the keywords adequately capture the range of posts dealing with open space.

Site Visits

Two site visits were conducted at Peter F. Schabarum Park and Pathfinder Regional Park, using the Toolkit for the Ethnographic Study of Space (Low et al., 2019). TESS is an evidence-based tool that has long been used for studying the everyday life of public spaces. Rationale: Taking questions adapted from TESS, the site visits aimed to uncover the causes of social exclusion (if any) and lack of diversity in the two parks. The site visits identified the types of users in the park, and recorded common social behaviors and usages of the park. Weaknesses: Parks only comprise one aspect of open space. Restricting site visits to parks exclusively fails to fully depict how public spaces are generally used. This limitation was overcome by expanding flyering efforts to spaces commonly utilized by seniors, such as major plazas, public facilities (libraries, community centers), and supermarkets in Rowland Heights and Hacienda Heights. The survey further identified common plazas and open spaces in RH and HH that are well utilized by the community.

Surveys

A survey was created with questions adapted from “Placemaking for an Aging Population,” a toolkit created by Loukaitou-Sideris et. al (2014), notably to create spaces specifically for seniors (Appendix B). The survey was administered between January 10, 2022 - February 16, 2022. For survey dissemination, word was spread via email to community centers, faith-based organizations, and non-profit organizations, in addition to physical flyering at community centers, grocery stores (i.e.- 99 Ranch on 1015 S Nogales St.), parks, and libraries (Appendix C). Rationale: The survey provided an opportunity to capture a wide range of responses, much more than interviews could. Although the survey was open to the general public, the project aimed to assess senior preferences, and as such was geared towards the senior population - the survey requested respondents to share the survey with their older adult family members, and to assist them if possible. Since the survey allowed respondents to specify whether they were over or under the age of 65, it hoped to provide an accurate depiction of senior preferences when it comes to open spaces. Surveys were conducted and assessed through AirTable (a database that allowed survey data to be automatically inputted into a spreadsheet type database). Weaknesses: The survey was administered in English, Korean, and Spanish (Appendix B). A large concern was ensuring that enough responses were collected before the survey period was closed. Such was reinforced with the promise of a lottery for \$10 gift cards, which were delivered to 3 survey participants and funded through a fellowship provided by the UCLA Lewis Center.

Findings and Analysis

The analysis tools present a series of pedestrian, social, and physical improvement concepts that inform open space use in Rowland Heights and Hacienda Heights. The social and physical elements expressed by the community translate into 18 possible improvements that can be set in place to promote greater accessibility for seniors in open spaces. The methodology used for the findings included a macro-level zoning analysis of land use and open space accessibility, social media scans, surveys, and site visits to two of the largest open spaces in each of the communities. The following section describes findings in detail.

1. Zoning Characteristics

To assess open space needs, I performed a spatial analysis of park space in the East San Gabriel Valley, and reviewed relevant plans for long-term visions/framework of parks as catered to seniors. This was crucial for defining the two study sites. Using Social Explorer (a comprehensive mapping tool providing access to Census demographic data), the highest density of senior residents was compared to park density in the surrounding environment. Using American Community Survey (ACS) 2019 demographic data to locate those “Over 65+” and overlaying that with “Parks & Open Space”, two census tracts in Rowland Heights and Hacienda Heights were discovered to have the highest ratio of number of seniors to park density - Census Tract 4087.04 with a senior density of 28.27% (or 936 people), and Census Tract 4086.28, with a senior density of 24.07% (or 1246 people) (see Fig 1.1).

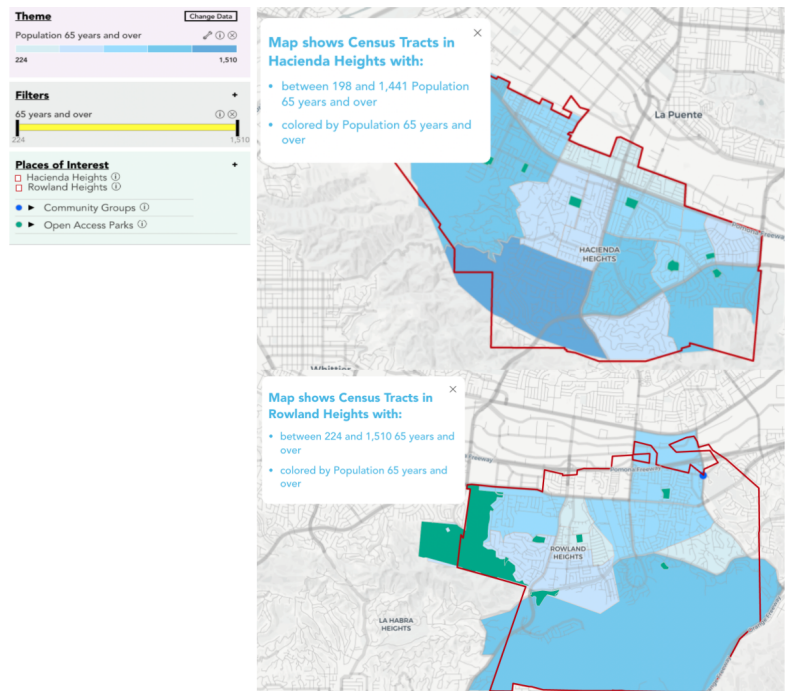


Figure 1.1, showing senior population density according to ACS 2019 data in Hacienda Heights (top) and Rowland Heights (bottom).

Rowland Heights and Hacienda Heights are primarily zoned for neighborhood residential and commercial uses. According to the zoning map found below, multi-family residential uses are scattered throughout neighborhood residential areas. Areas zoned as open space (colored in light gray) mostly exist on the edges of the two communities, away from residential housing (Single Family Residence, Residential Agricultural, Other (which includes Residential Planned Development)) (see Fig 1.2 and Fig 1.3). In Hacienda Heights, the census tracts with the greatest senior density are on average 1.65 miles away from the nearest park (see Fig 1.4). In Rowland Heights, two public parks such as Pathfinder Regional Park and Blevins Park are located in the census tract with the greatest senior density, but there is a contrasting lack of open space in the northeastern segment of the community (see Fig 1.1). As a result, challenges arise for residents who do not have ready access to areas zoned as open space (defined as over 1 mile), as a consequence of living far away from parks- the main type of area zoned as open space.

Open space is recognized to come in many forms, including plazas and trails. The survey, discussed later in this section, uncovers the experiences faced by senior residents when they live far away from traditional forms of open space.

As areas primarily for residential spaces are designed around uneven terrains, there is latent potential for a multitude of community spaces, services, and residential development that can activate safer open spaces for seniors.

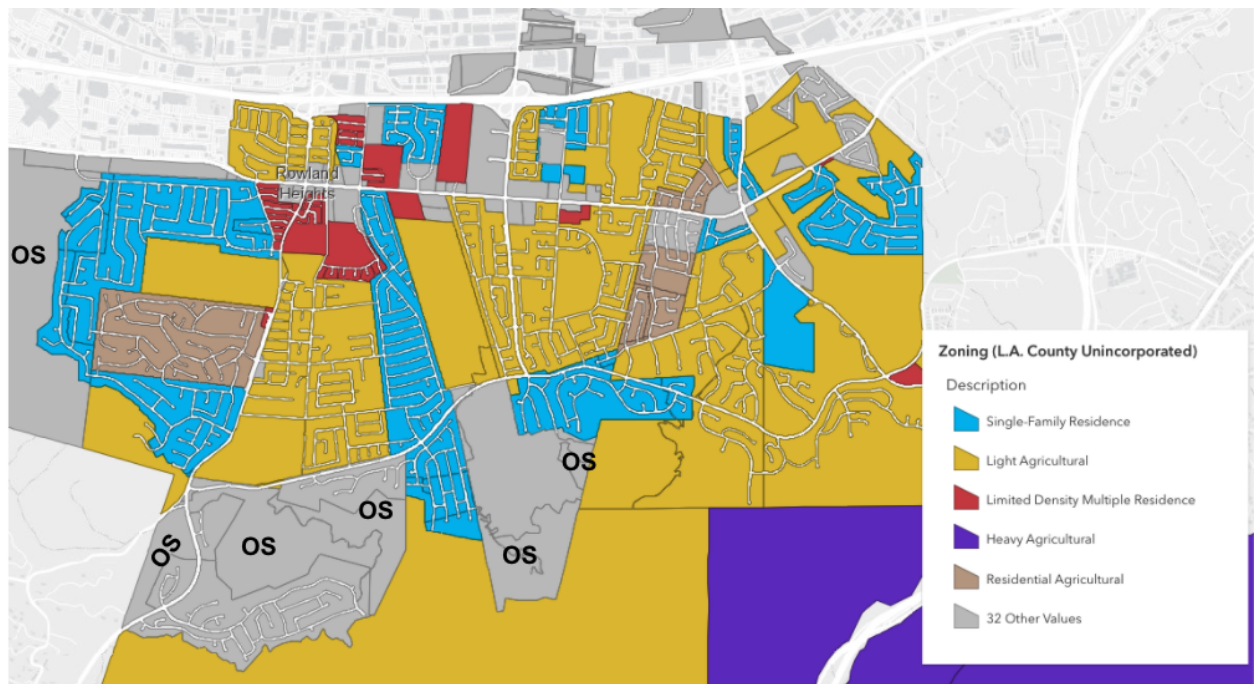


Fig 1.2 Zoning Map of Rowland Heights (Open Space labeled as OS)

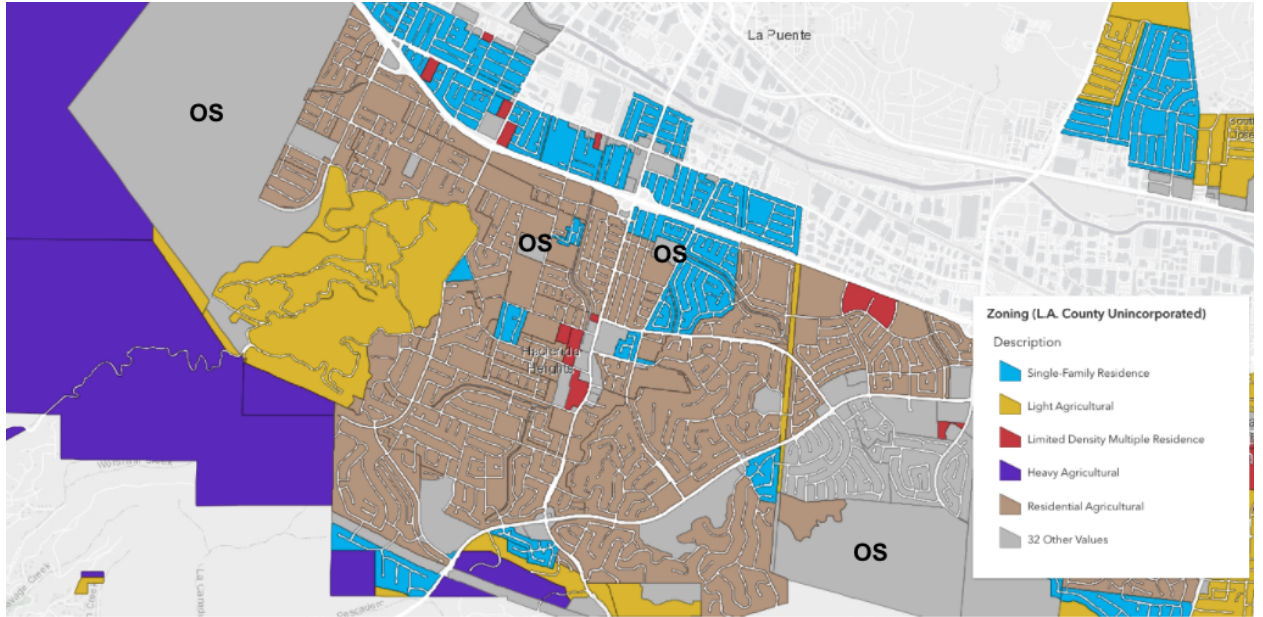


Fig 1.3 Zoning Map of Hacienda Heights (Open Space labeled as OS)

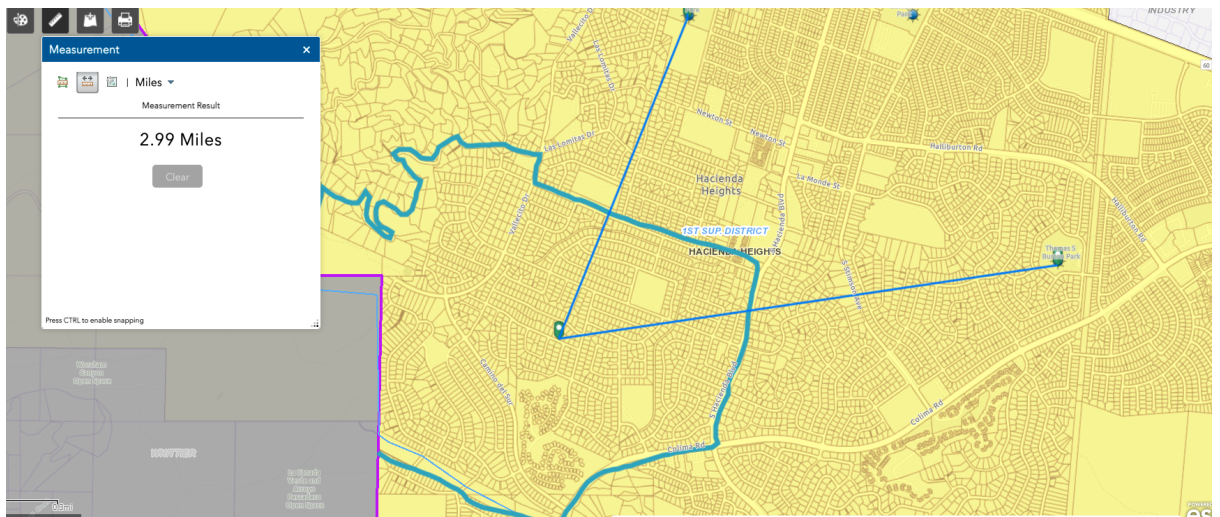


Fig 1.4 Average distance away from Parks

2. Social Media Scans (Twitter and Google)

Social media scans were conducted on Twitter using various keywords, such as the two communities: “#RowlandHeights”, “#HaciendaHeights”, as well as open spaces mentioned in survey responses: “#Schabarum, #Pathfinder, #GloriaHeerPark, #RowlandHeightsCommunityCenter, #RoyalVistaGolf Course, #RossmoorPark”. Such keywords generated 33 relevant tweets from March 2020 to January 31, 2022. Due to limitations faced by COVID-19, social media scans were considered crucial pathways to understand community spaces in a pandemic-stricken period. Below is an assessment of the tweets, and a full chart of tweets can be viewed in the appendix (Appendix A).

2.1 Twitter Scan

Tweets ranged from 2/8/2019 to 1/26/2022, in order to evaluate both pre-pandemic and pandemic sentiments (Appendix A). 23/33 of the tweets mentioned Hacienda Heights, 8/33 tweets mentioned Rowland Heights, and 2 mentioned both Hacienda and Rowland Heights. Several tweets mentioned disaster-related circumstances (10/33) : 3/33 of the tweets mentioned crime, 2/33 mentioned theft from a vehicle, 5/33 mentioned a brush fire, and (1/33) mentioned a flood. Other park-related recreation (7/33) included basketball (3/33), hikes (2/33), and walking a pet (2/33).

There were several tweets about community engagement (14/33), which included common themes such as peaceful protests (6/33), community health (3/33), community recycling programs (2/33), food distributions (1/33), parades (1/33) and community workshops (1/33). Places for recreational or community activities were Schabarum Park (13/33), Pathfinder Park (1/33), Gloria Heer Park (2/33), temple (2/33), Los Altos Gym (3/33), Dibble Adult School (1/33), St. John Vianney Catholic Church (2/33), William Steinmetz Park (1/33), Hacienda Heights Community Center (1/33). Of all posts, only 3/33 highlighted or mentioned seniors.

2.2 Google Scan

A Google scan of the word “Rowland Heights plaza” resulted in twelve different plazas, featuring eateries, supermarkets, and local businesses in Rowland Heights. 9/12 of the plazas were located along Colima Rd, a major transit route by car, suggesting that they are mostly accessible by vehicular forms of transportation. The same scan but with the phrase “Hacienda Heights plaza” resulted in only three plazas in Hacienda Heights, that ranged from a strip mall to a shopping plaza with various large businesses (i.e.- Chase Bank, DAISO, H&R Block). The general consensus among Google reviewers is that the plazas are mostly utilized for dining, shopping, or service utilization purposes. One reviewer mentioned visiting while “everything (was) closed” but observed that there were “a lot of benches” where people could sit outdoors. Most, if not all accessibility issues dealt with parking or a lack of parking spaces.

3. Survey Results

The survey collected 30 responses, of which 25/30 (83.33%) were above the age of 65. Questions ranged from the types of parks that seniors frequently visited, the physical and social infrastructure desired at the park, to the activities typically performed at the open space.

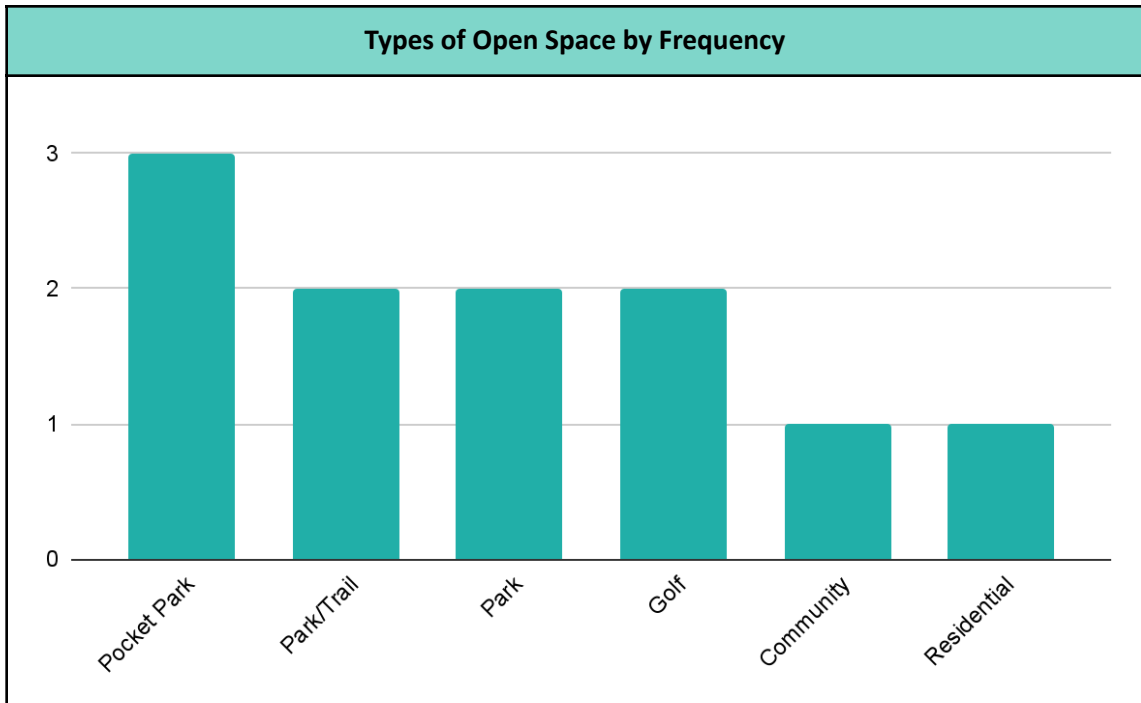
Based on the results of the survey, the community would like to see physical improvements that include planting additional trees, incorporating shaded areas, providing greater maintenance, and increasing natural features in public spaces. In addition, social improvements such as enacting greater security measures are also desired. Below I discuss the survey findings in more detail.

3.1 Open Space Statistics

The table below shows the areas most frequently visited by survey respondents (Table 3.1). Based on these findings, Gloria Heer Park in Rowland Heights had the greatest number of appearances in the type of open space that was frequented. Twitter queries also revealed the importance of Gloria Heer Park as a meeting place for peaceful protests, such as the BlackLivesMatter protest that took place between on June 4, 2020 (Appendix A).

Table 3.1 Types of Open Space Frequented by Airtable Survey Respondents

| Open Space frequented | Type of Open Space | # of Respondents |
|----------------------------------|------------------------|------------------|
| Gloria Heer Park | Pocket Park | 3 |
| Peter F. Schabarum Park | Park/Trail | 2 |
| Pathfinder Park | Park | 2 |
| Royal Vista Golf Course | Golf Course/Greenspace | 2 |
| Rowland Heights Community Center | Community Center | 1 |
| Neighborhood Sidewalk | Residential | 1 |
| Grand Avenue Park | Park | 1 |
| Carbon Canyon Regional Park | Park/Trail | 1 |
| Neighborhood Trail | Trail | 1 |
| Rossmoor Park | Park | 1 |
| Fairway | Pocket Park | 1 |

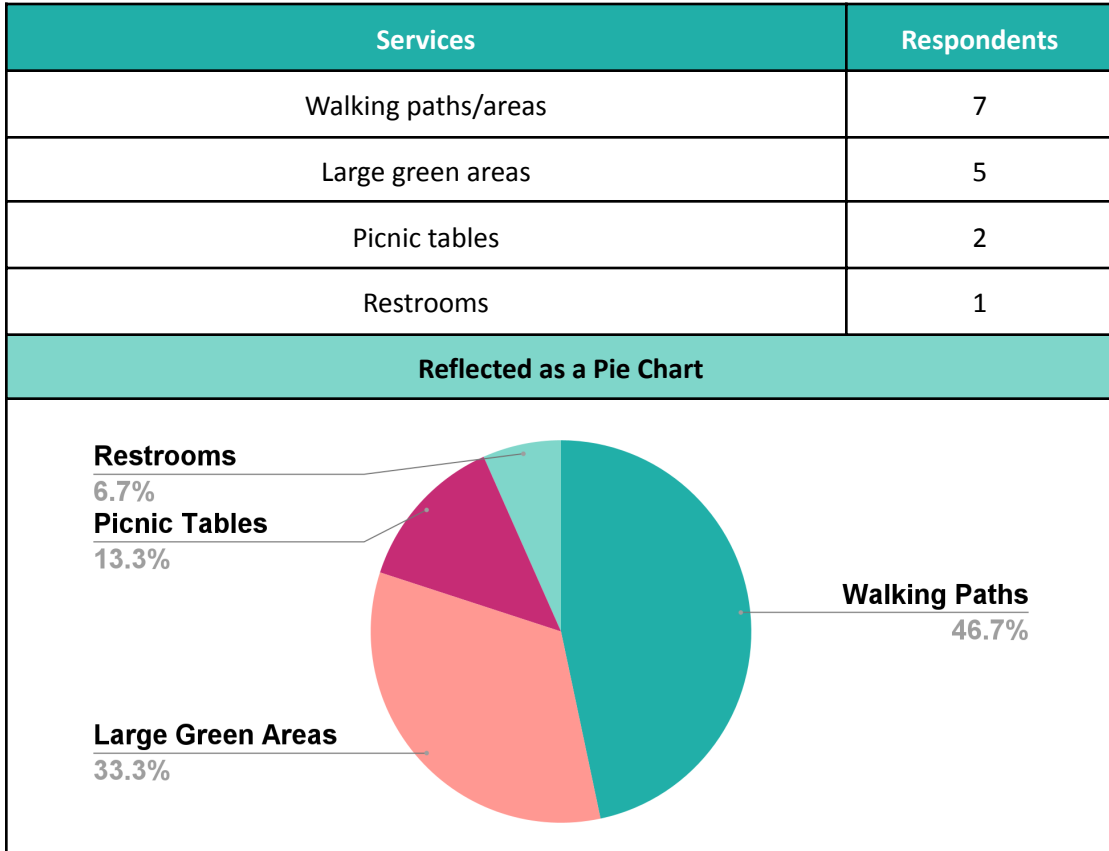


The type of open spaces most frequented by seniors in a given week were parks, which were frequented by 9/30 (or 30%) of respondents, including pocket parks. The parks specifically mentioned were Pathfinder Park (in Rowland Heights), Peter F. Schabarum Park (in Hacienda Heights), Gloria Heer Park (in Rowland Heights), Grand Avenue Park (Chino Hills), Rossmoor Park (Los Alamitos), and Fairway (Hacienda Heights). Three (10%) respondents mentioned frequenting trails, located in Peter F. Schabarum Park (Hacienda Heights), Carbon Canyon Regional Park (Brea), or locally in Rowland Heights. One respondent (3.33%) mentioned visiting a community center as a means of accessing open space, specifically the Rowland Heights Community Center.

3.2 Services utilized at Open Spaces

Services utilized at open spaces included walking paths (7/30 or 23.33% of respondents), large green areas (5/30 or 16.67% of respondents), picnic tables (2/30 or 6.67% of respondents), and restrooms (1/30 or 3.33%) (Table 3.2). While all of these services mentioned serve different purposes, they present a commonality in that they are all services that are usually provided at public parks.

Table 3.2. Services Utilized at Open Spaces by Airtable Survey Respondents



3.3 Physical Factors that Positively Correspond to Open Space Use

In another question, respondents were asked about physical factors that they felt positively correspond to open space use (Table 3.3). The two physical elements reported most commonly were natural features (such as water, birds and vegetation) and shaded area availability (7/30 or 23.33% respondents for each selection). The next most frequent physical elements mentioned were outdoor seating availability, and the presence of more trees (6/30 or 20% for both). Other responses included public restrooms (3/30 or 10%), exercise equipment (2/30 or 6.67%), pedestrian oriented streets (2/30 or 6.67%), better parking near public spaces (2/30 or 6.67%), better lighting (1/30 or 3.33%), and street lamps and overall brightness (1/30 or 3.33%).

Table 3.3. Physical Elements Reported by Airtable Survey Respondents

| Physical Element | # of Respondents (seniors only) |
|---|---------------------------------|
| Natural features (water, birds, vegetation) | 7 |
| Availability of shaded areas | 7 |
| Outdoor chairs/benches | 6 |
| More trees | 6 |
| Public restrooms | 3 |
| Exercise equipment | 2 |
| Pedestrian oriented streets | 2 |
| Better parking around public spaces | 2 |
| Better lighting | 1 |
| Street lamps and overall brightness | 1 |

3.4 Social Factors that Positively Correspond to Open Space Use

Respondents were also questioned about the types of social factors that positively correspond to their open space use (Table 3.4). From a range of multiple choices, six options were selected by respondents. From an order from greatest to least frequency, 6/30 indicated better maintenance and cleanliness as being an important social factor, 6/30 indicated the presence of security at the space as being of importance, 5/30 indicated the importance of proximal distance between their neighborhood and open space; 2/30 indicated a desire for planned transit routes leading directly to the open space; 1/30 indicated more programmatic design and organized activities in the space as being an important social factor; and 1/30 indicated a preference for more open space signs (in different languages).

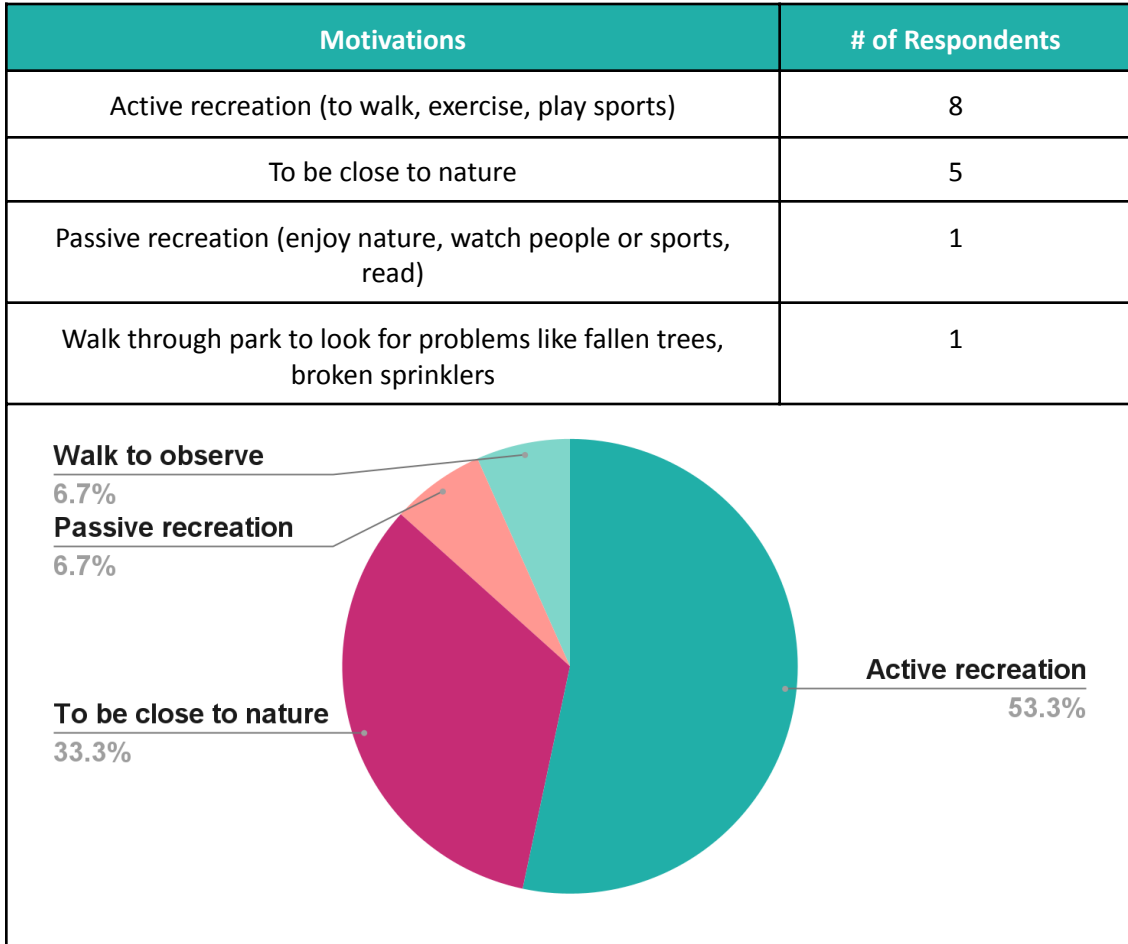
Table 3.4. Social Elements Reported by Airtable Survey Respondents

| Social Element | # of Respondents |
|--|------------------|
| Better maintenance and cleanliness | 6 |
| The presence of security at the space | 6 |
| More open space in your neighborhood | 5 |
| Planned transit routes leading to open space | 2 |
| More programs and organized activities in the space | 1 |
| Open Space signs (park signs) in different languages | 1 |

3.5 Motivations facing Open Space Use

Motivations that senior respondents had to use open space included: active recreation (8/30 or 26.67%), proximity to nature (5/30 or 16.66%), passive recreation (1/30 or 3.33%), and environment beautification (i.e.- picking up trash, reporting broken or fallen infrastructure) (1/30 or 3.33%). Of these motivations, active recreation was reported most frequently, signifying the frequent use of open space for outdoor recreation.

Table 3.5. Motivations for Open Space Use by Airtable Survey Respondents



3.6 Barriers/Inhibitors facing Open Space Use

In response to a short answer question that inquired about issues or inhibitors that the respondents faced with open space use, there were only four responses. These responses culminated into two themes, both concerning accessibility (Table 3.6). The first theme revolved around low walkability and transit inaccessibility - specifically regarding the need to drive to access open space. The second theme was social inaccessibility, due to limitations on in-person meetings for nonprofits or community organizations as a result of the pandemic.

Table 3.6. Barriers to Open Space Use by Airtable Survey Respondents

| Barriers | # of Respondents |
|--|------------------|
| Have to drive to open spaces, none near home | 2 |
| Limitations on in-person meetings for nonprofits and community organizations due to the pandemic | 2 |

3.7 Open Space during the Pandemic

A multiple choice question inquired about the types of open spaces that were used by respondents (Table 3.7.). Surprisingly, no respondent mentioned going to a plaza in order to access open space. This may indicate the lack of a plaza that can allow for active recreation, which is one of the top motivations that respondents mentioned for visiting open spaces. When accounting for the Google scan of plaza ratings, it can be confirmed that active recreation is rarely an occurrence in plazas.

Table 3.7. Open Spaces Used by Airtable Survey Respondents during the Pandemic

| Type of Open Space Used | # of Respondents |
|--|------------------|
| Neighborhood streets and sidewalks | 5 |
| The Park in my neighborhood | 5 |
| Large Parks | 2 |
| Pocket Parks (mini-parks, small, outdoor spaces) | 2 |
| Senior centers | 1 |
| Trails | 1 |

3.8 Open Space Conversions

In response to a multiple choice question regarding open space conversions, 6/30 (20%) of senior respondents indicated that they would like for vacant land to be converted into park space (Table 3.8). Additional spaces that seniors desired being converted into park space included unused infrastructure such as railroad lines (3/30 or 10%), parking lots (3/30 or 10%), Royal Vista Golf Course (2/30 or 6.667%), and drainage channels (1/30 or 3.33%).

Table 3.8. Desired Conversions into Open Spaces by Airtable Survey Respondents

| Desired Conversions into Open Spaces | # of Respondents |
|--|------------------|
| Vacant land | 6 |
| Unused infrastructure (e.g. railroad lines) | 3 |
| Parking Lots | 3 |
| Convert Royal Vista Golf Course into public park | 2 |
| Drainage Channels | 1 |

3.9 Advertising Campaign

A monetized ad campaign was conducted on Facebook, in an attempt to make the survey more visible specifically to senior residents in Hacienda Heights and Rowland Heights. The Facebook Marketing campaign ran from January 31, 2022 - February 5, 2022. With an aim of reaching those who were 65 and older, the advertising campaign utilized bright and large fonts on the flyer, as well as a hyperlink that would automatically redirect anyone who clicked on the advertisement (Appendix C). The Korean ad campaign generated 532 views and 10 link clicks, while the English ad campaign generated 1476 views and 15 link clicks, which summed up to an overall total of 25 clicks and 2008 views (See Appendix D).

The survey was also disseminated on NextDoor and Ring, two neighborhood mobile apps for community interactions. Overall, such interactions with social media platforms led to eight more responses on the survey, which was well below the expected goal.

4. Site Visits

30- minute site visits to two parks, Pathfinder Regional Park (Rowland Heights) and Peter F. Schabarum Park (Hacienda Heights) were conducted on February 3, 2022. The goal of the site visits was to primarily observe the types of interactions that took place in park spaces. To understand the results of the site visits, it is imperative to understand each park’s characteristics. The full list of observations, which took place using the T.E.S.S. park visit characteristics, can be viewed in Appendix D. Below is a summary of findings for each park site.

4.1 Pathfinder Regional Park



Fig 4.1 Route traveled along Pathfinder Park in Rowland Heights.

Pathfinder Regional Park is a 29-acre space that includes a community center, basketball court, baseball field, playground, and adult recreation site (Fig 4.1). The park is located atop a green hilly terrain with a scenic view of the mountains and surrounding community. Given the presence of structured facilities, there were several types of people that were present during the interviews. Most notably, most park users were alone during their visit, and partook in leisurely walking and exercise. There was a free snack distribution for children occurring during the first site visit on February 3, which was enforced by the presence of on-site park attendants. BBQ pits and picnic tables were also provided on site. About 20 cars were parked in the upper parking lot where most recreational facilities were located around 2:30 pm, which is a larger than average number considering that it was a weekday and during typical school/work hours. Park security and a police car were also spotted on site during the Feb. 3 site visit.



4.2 Peter F. Schabarum Regional Park

Fig. 4.2 The path used to observe Peter F. Schabarum Regional Park

Peter F. Schabarum Regional Park (Schabarum) is quite different from Pathfinder, beginning with the size of the park. Schabarum is a 575-acre park with a protected stream, tennis courts, playgrounds, and numerous trails (Fig 4.2). The walking paths and trails remain mostly unpaved to protect the natural environment. Several shallow wooden bridges are placed throughout the park to get

across the protected stream that runs through the park. An abundance of greenery surrounds the site, and masks visibility to surrounding residential or commercial corridors. BBQ pits and an abundance of picnic tables were also observed, along with park signage with instructions on renting picnic spaces for large groups. Having a formalized reservation process for each of the main picnic areas suggests that such passive recreational use may be common, although none were reserved at the time of the site visit. There were no on-site park attendants besides staff working in a front office at the general entrance of the park. A total of 92 park users were observed during the site visit on February 3, 2022. Most were with family members or in groups of 2+. Surveillance cameras were not visible, but street lamps were seen along parking lots. Surveillance may be stricter on weekends, when an entrance parking fee is applied.

Planning and Policy Recommendations: Designing Senior Friendly Open Spaces

Design Guidelines Overview

This section synthesizes the findings presented in the previous chapter to offer suggestions for creating senior-friendly open spaces. Specifically, the chapter draws upon primary and secondary sources, as well as a brief overview of affordable items that can be used to create senior-oriented open spaces. Primary data collection was gathered through surveys disseminated at community centers, parks, and grocery stores at various points in Hacienda Heights and Rowland Heights. Additional information came from a detailed social media scan of the recent perceptions towards open space on social media, as well as site observations at major open spaces. Additionally, the recommendations draw from past design guidelines and toolkits about the design of senior-friendly spaces. The recommendations begin with a section on the current characteristics of plazas, parklets, and vacant lots in Rowland Heights and Hacienda Heights. The section ends with affordable and feasible guidelines for transforming nontraditional areas of open space, such as plazas and vacant lots.

The design guidelines within this section intend to provide insightful suggestions for creating open spaces such as parks, plazas, pathways, and recreational areas with seniors in mind. These guidelines are context-specific, as they intend to be directly applicable to the East San Gabriel region. In order to provide context-specific guidelines, a number of physical and environmental characteristics, such as topography, size, surrounding land uses, and street networks were taken into consideration.

Existing conditions in Hacienda Heights + Rowland Heights

When considering spaces that can be activated as open spaces in unincorporated areas such as Rowland Heights and Hacienda Heights, plazas, parklets, and vacant lots are three public space typologies that I would like to propose. The following section describes plazas, parklets, and vacant lots in Rowland Heights and Hacienda Heights, and explains how the current conditions are not meeting the needs and expectations of seniors.

Public Space Typology #1: Plazas

Rowland Heights, in particular, is characterized by segments of plazas that are adjacent to major roads, which provides a significant opportunity to activate the sidewalks leading to these plazas as parklets, as well as activate unused spaces in the plazas (Figure 1.1). The survey reflected the low perception of plazas as forms of open space. As such, pedestrian street activity in plazas is high, but is mostly characterized by shopping at grocery stores, accessing businesses, and eating at dining facilities within the plazas. For seniors who are still able to perform independent tasks such as driving, grocery shopping, or even taking a short walk to the grocery store from their home, plazas can provide a central location for enjoying rest after those duties. Most plazas in Hacienda Heights and Rowland Heights that contain grocery stores lack consistent outdoor benches, shade (from trees, bushes, or any other natural vegetation), “foils of conversation” such as fountains, or outdoor rest areas secluded from vehicle-related noise or other sounds (Figure 1.2). Spaces in the plazas typically do not have signs designating areas for temporary rest. These elements reflect a lack of privacy, safety, and comfort to be perceived as spaces that seniors may frequent for respite when they make trips to plazas. On the other hand, a trip to 99 Ranch, a Chinese grocery store in Rowland Heights (1015 Nogales St.), revealed a large interior space, fountain, and various small businesses located within the grocery store building itself (Figure 1.3). The fountain, which is surrounded by a clay barrier wide enough to seat people, was well utilized by senior citizens and grocery shoppers who had completed their grocery shopping. This was accompanied by the relative quietness of this interior space, away from the busy noises of the parking lot. This suggests that implementing fountains accompanied by ample shade and sound barriers may be well utilized by seniors who are already visiting plazas for their errands, and that overall, beautifying commercial plazas may help reactivate plazas as open spaces.

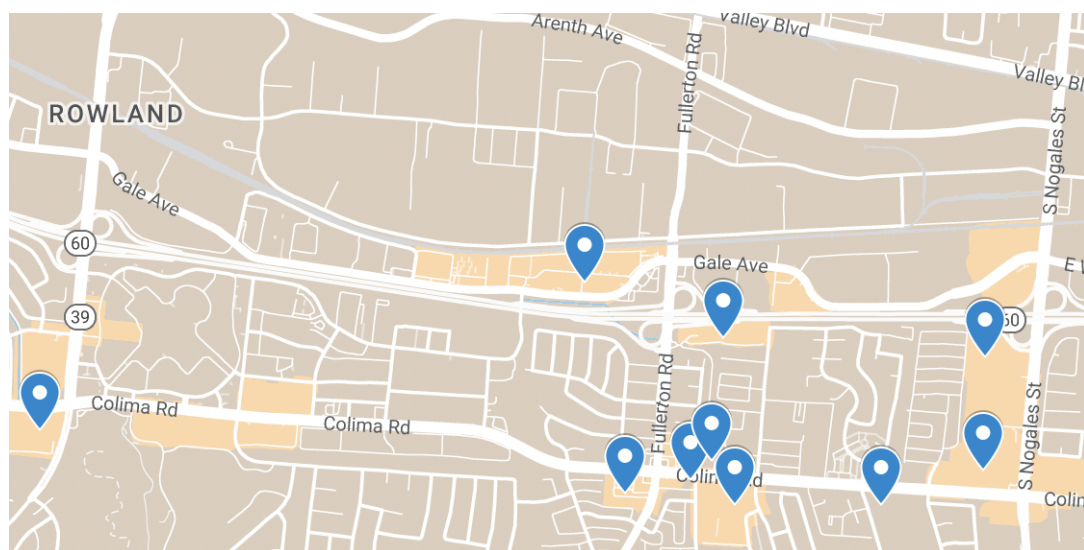


Figure 1.1. Blue pins denote the plazas that exist in Rowland Heights, which are centrally located along Colima Rd., a major bustling street.



Figure 1.2. GW Plaza alongside Colima Rd., as seen from Street View on Google Maps.



Figure 1.3. The 99 Ranch Market grocery store on 1015 Nogales St. in Rowland Heights, featuring an interior “plaza” consisting of various small businesses, comfortable indoor temperatures, and a fountain.

Public Space Typology #2: Parklets

Parklets are a prototype for testing the probability of reclaiming an underutilized roadway or unused parking spots as public space without much capital expenditure. The materials for parklets usually serve as temporary fixtures, making the design adaptable to changes or even removal. Costs for construction of a parklet are typically covered by business owners that recognize the ability of the parklet to attract customers. Parklets provide an economic development potential by creating spaces, usually on sidewalks, for the community to linger and even eat outdoors. This has been especially true during the pandemic, when most restaurants were closed for indoor dining.

Parklets are defined as “small sidewalk extensions” intended to provide greater open or green space to the public (Contra Costa County Public Works Department, 2016). The survey suggested that many senior residents utilize neighborhood sidewalks as part of their daily physical activity regime. One concern may be that already narrow corridors that are used by seniors as part of their existing walking routes may pose challenges for seniors if they are used as parklets. Given the relatively high-density residential areas in Rowland Heights and Hacienda Heights, parklets should be located in areas that will not generate traffic congestion, be a burden on businesses and facilities, and are compatible with the maintenance of senior daily activities. Regarding the specific location of parklets in Hacienda Heights and Rowland Heights, there are many business corridors in both communities that may be considered. However, a common feature in many business corridors is the narrow sidewalks bordering traffic-heavy streets, which may make parklet and open space designation challenging and unsafe. In addition, most current outdoor seating outside of restaurants in Rowland Heights are exclusively limited to those dining in restaurants and are reserved for use in the evening. Many restaurants also use a tarp to conceal their seating amenities from all visible angles from a distance, to maintain privacy.

Another consideration may be to create parklets in areas where commercial plazas or vacant lots are few. Many areas in the NorthEast region of Rowland Heights are zoned for A-1-1 (Light Agricultural) or RPD (Residential Planned Development) (Figure 2.1). Survey respondents noted the lack of recreational park space in the NorthEast region of Rowland Heights, with similar opinions echoed in a Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment conducted in 2016. This indicates that there may not have been significant progress towards providing greater open space opportunities in the region (Los Angeles County, 2016). Because of the existing development pattern in the area and current land use regulations, there are limited vacant spaces that could be transformed into parklets. Thus, an opportunity to increase greenspace in the area may be to activate parklets by encouraging facilitation of parklet-related discussions between residents, Homeowner Associations, and neighborhood community groups.

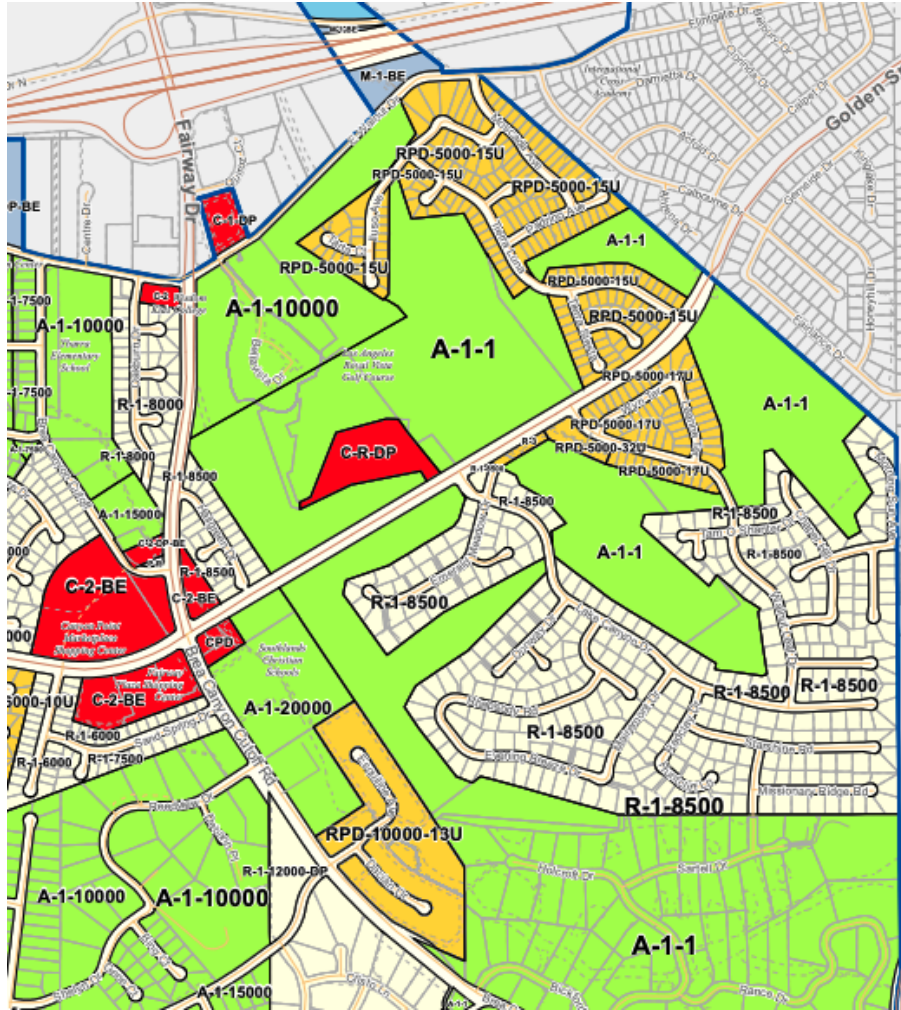


Figure 2.1 - Northeastern region of Rowland Heights showcasing areas predominantly zoned as A-1-1 (Light Agricultural) or RPD (Residential Planned Development).

Using the Parklet Kit of Parks and Parklet Application Manual as created by LADOT People St Program may be effective in implementing time-efficient change (LADOT: Liveable Streets: People St., 2021). The former provides pre-approved designs that may expedite approval and implementation of parklets.

Public Space Typology #3: Vacant Lots

Another possibility of expanding open spaces is looking into the potential of vacant and underutilized lots in Hacienda Heights and Rowland Heights. Vacant lots are underutilized resources that have the potential to significantly bring value to the socioeconomic and environmental well-being of communities. When vacant lots are left unmanaged, they can strain budgets, decrease property values, and reduce the quality of life for residents. These lots have the key potential to engage senior residents in the community development process, but also educate them on challenges and open space health benefits through small-scale greenspace projects.

The majority of seniors surveyed felt positively about the idea of transforming vacant lots into open spaces. However, only one out of the thirty respondents indicated actually using vacant lots as a means of accessing open space. This may be because there is little knowledge about vacant lots in these two communities. Based on research, it is unknown whether the unincorporated communities of Rowland Heights and Hacienda Heights host disproportionate amounts of vacant land compared to the East San Gabriel Valley average. In order to provide a greater understanding of vacant lots in Hacienda and Rowland Heights, it may be beneficial to perform a comprehensive assessment of vacant lots.

Next steps could be performing an underutilized site inventory of a variety of buildings and properties that qualify as “underutilized sites”. Luckily, such is already provided through the Housing Element, which is required by the State to identify vacant and underutilized sites. In order to access more data on underutilized sites, one can explore the Housing Element of their respective community to gain more local information. Documenting the location and condition of vacant land generates greater possibilities for activating, incorporating, and preserving space for the benefits of seniors, and ultimately improving the spaces themselves.

Recommendations based on Current Conditions

The data gathered from the various sources lead me to propose six purposes that senior-friendly open spaces should strive to satisfy. These outcomes may be valuable for all open space users but may be especially helpful for seniors in Hacienda and Rowland Heights. The following paragraphs offer suggestions and recommendations for each of the purposes.

| Six Purposes | |
|--------------|-------------------|
| 1. | Control |
| 2. | Safety |
| 3. | Access |
| 4. | Social Support |
| 5. | Biophilic Design |
| 6. | Active Recreation |

Control

The perception of control is of particular importance to seniors, who may be seeing some of their physical or cognitive abilities lessening with age (Loukaitou-Sideris et al., 2014). Control is achieved when users have a good sense of orientation in getting around open spaces, especially in sensing the different offerings of an open space. For open spaces in areas such as Rowland Heights and Hacienda Heights, which are predominantly utilized by Asian and Hispanic residents, a sense of orientation may refer to clear comprehensible signage in various languages, and culturally inclusive accessibility components, such as areas welcoming taichi or benches to support large family outings. Also related to control is the ability to make a choice. The perception of choice is particularly important to seniors. Open spaces should provide amenities designated for a variety of uses, such as benches to rest and paths for walking.

Control-Related Recommendations for Non-Traditional Open Space (Plazas, Parklets, Vacant Lots)

Recommendations for good orientation:

- *Plazas, Parklets, and Vacant Lots:* Provide visible signage in predominate languages (especially Chinese and Spanish) marking free access and use of the open space.
- *Plazas:* Provide adequate lighting to secure visibility.

- *Plazas, Parklets*: Provide appropriate signage to guide pedestrians to the open space, especially when it is not visible from a distance (i.e.- corner of a plaza)
- *Plazas and Parks*: For large plazas or open spaces such as the Peter F. Schabarum Park, display a map with the layout of the open space in the main entrance and at various open space sites, so visitors can have a good sense of orientation.
- *Plazas, Parklets, Vacant Lots*: Provide a clear layout of various paths in ways that are easily legible, such as bright and painted walking paths.

Recommendations oriented towards choice:

- *Plazas, Parklets, and Vacant Lots*: Offer different spaces to sit- give options for visitors to be in the sun or in the shade (from trees, a trellis, etc.)
- *Plazas, Parklets, and Vacant Lots*: Provide views of different open space features- flowers, art, water features.
- *Plazas, Parklets, and Vacant Lots*: Provide options for seating for various types of user groups - alone, in small groups, and large groups.
- *Plazas, Parklets, and Vacant Lots*: Provide a flat open plain that can accommodate multiple activities (yoga, picnic, stretching).

Safety

Safety concerns are more pronounced among senior open space users, and such concerns about safety may lead them to avoid using open spaces. Given the hilly urban environment in the unincorporated regions, the fear of tripping and falling may be another stress felt more by seniors than younger users.

Within the survey, two of the most commonly reported social factors that positively correlate with open space use were better maintenance and the presence of security in open spaces. According to Le Grange, et al. (1992), the presence of bystanders serves as “natural surveillance”, as it can discourage people who may otherwise be attempting to commit a crime (LaGrange et al., 1992). When an open space is well maintained, it shows that there are natural caretakers, who can help park visitors feel safe. Thus, open space designs that increase the visibility of the space even from a distance are important.

Also related to safety is comfort. Physical and psychological comfort should be an explicit goal of open space design. Senior citizens are not inclined to visit a space if they do not feel comfortable.

Safety-Related Recommendations for Non-Traditional Forms of Open Space (Plazas, Parklets, Vacant Lots)

Recommendations for crime prevention:

- *Plazas, Parklets, and Vacant Lots:* Consider enclosing the park with transparent decorative fencing that can provide enclosure but does not block visibility.
- *Plazas, Parklets, and Vacant Lots:* Consider locking the space after sunset or providing single-seat benches to avoid individuals sleeping in the space.
- *Plazas, Parklets, and Vacant Lots:* Provide good lighting throughout the space.
- *Vacant Lots:* Consider surveillance features, such as surveillance cameras, emergency phone boxes, motion detectors.
- *Plazas, Parklets, and Vacant Lots:* Keep the open space clean and well-maintained.
- *Plazas:* If possible, provide the presence of security guards in the space, or organize community volunteers to oversee the space.

Recommendations for comfort:

- *Plazas, Parklets, and Vacant Lots:* Install shaded areas around the open spaces that provide comfortable seating with ergonomic designs. Seats should be at least 16-17 inches from the ground to support accessibility by seniors.
- *Plazas, Parklets, and Vacant Lots:* Consider utilizing open space that is far away from traffic noises and other nuisances.
- *Plazas, Parklets, and Vacant Lots:* Consider natural seating materials such as wood or stone that may not heat up quickly or retain heat during hot summers.
- *Plazas, Parklets, and Vacant Lots:* Place seats and benches under large trees, gazebos, canopies, or trellises that can provide shade.
- *Plazas, Parklets, and Vacant Lots:* Place trees strategically to protect visitors from direct sunlight. For parklets located between buildings, consider orienting a park in a way that protects from direct sunlight.
- *Plazas, Parklets, and Vacant Lots:* Provide directions to a nearby restroom in clear signage and in multiple languages, and offer restrooms that have handicap access.
- *Plazas, Parklets, and Vacant Lots:* Provide trash receptacles to promote cleanliness and tables to promote eating and drinking comfortably.

Access

As seen from the survey, the proximity of an open space from one's place of residence significantly affects open space visitation for senior users in Rowland and Hacienda Heights. Although this may be generalized to all open space users, it is particularly true for seniors, who face more physical barriers than younger users. Thus, the ability to get to the open space easily is a particularly important aspect of usage.

Access-Related Recommendations for Non-Traditional Forms of Open Space (Plazas, Parklets, Vacant Lots)

Certain locational and design characteristics, including those surrounding the site, will make the space more physically and psychologically welcoming to seniors.

- *Plazas, Parklets, and Vacant Lots:* Locationally, the open spaces should be placed in areas already well traveled by seniors. Such could be senior citizen centers, churches, community centers, and neighborhood grocery plazas.
- *Plazas, Parklets, and Vacant Lots:* Provide paving that does not interfere with movement, by opting for flat paths that can provide access for people on wheelchairs.
- *Plazas, Parklets, and Vacant Lots:* Programmatic design: Consider using the space to hold various events that may attract seniors, such as outdoor farmers markets, yoga/taichi, food distribution, and outdoor health clinics.
- *Plazas, Parklets, and Vacant Lots:* Provide ADA accessible design for all sidewalks leading to the open space.
- *Plazas, Parklets, and Vacant Lots:* Provide opportunities to sit or rest briefly on common routes to the open space.

Recommendations for preventing falls:

- Walking on neighborhood streets in the East San Gabriel Valley may often mean walking on hilly and unpaved roads. Thus, it can be beneficial to consider having good lighting along pedestrian paths, and providing curbs along paths to make movement safer for those on walkers or wheelchairs.
- *Plazas, Parklets, and Vacant Lots:* Provide paths that are flat or have a gentle slope with no steps.
- *Plazas, Parklets, and Vacant Lots:* Provide even and not cracked sidewalks.

Recommendations for Traffic:

- *Plazas, Parklets, and Vacant Lots:* Consider proximity to public transit stops when selecting an open space location.
- *Plazas, Parklets, and Vacant Lots:* Incorporate use of open spaces in quiet, low-traffic areas. If the open space is bordered by a busy street or intersection such as I-60 and Fullerton Rd., consider providing additional entrances on quieter, more accessible sites.

- *Plazas, Parklets, and Vacant Lots*: Provide safe crossings on intersections with clear signaling, and allow more traffic light time to cross the street near the open space.
- *Plazas*: Provide more signalized crossing zones in parking lots, if open space is located in a plaza.
- *Plazas, Parklets*: For open space located on parklets and plazas, consider traffic calming measures on streets bordering the space, such as bulb-outs (sidewalk extensions that decrease the street crossing distance), pedestrian refuge islands (places where pedestrians can wait in the middle of the street), curb ramps, and medians for safer crossing.

Social Support

Most seniors observed in open spaces were usually with others. This suggests the importance of social support, or the human need of desiring support and care from others. Social support and health are strongly correlated with open space use, which can encourage seniors to interact with others (Loukaitou-Sideris et al., 2014). Designing spaces oriented for social support can provide opportunities to incorporate better programmatic activities, and can encourage activities among seniors.

Social Support-Related Recommendations for Non-Traditional Forms of Open Space (Plazas, Parklets, Vacant Lots)

- *Plazas, Parklets, and Vacant Lots*: Provide seating that can encourage human interaction, such as seats at right angles or benches that face each other.
- *Plazas, Parklets, and Vacant Lots*: Provide infrastructure for social interaction, such as exercise equipment placed in close proximity to one another.
- *Plazas, Parklets, and Vacant Lots*: Provide flat areas for large group activities, such as yoga, tai-chi, group stretching.
- *Plazas, Parklets*: Implement “foils of conversation”, such as greenery, birdhouses for nature watching, fountains, or other elements that can be enjoyed.
- *Plazas, Parklets, and Vacant Lots*: Organize community events such as outdoor free concerts, food banks, farmers markets, holiday celebrations (such as Lunar New Year) and movie nights in the park.
- *Plazas, Parklets, and Vacant Lots*: Many facilities in Rowland and Hacienda Heights have gotten rid of community bulletin boards in the past few years. Create a node for local information exchange near a centrally located open space with a bulletin board exclusively for senior citizens.
- *Plazas, Parklets, and Vacant Lots*: Create outdoor reading rooms such as “free little libraries”, where community members can donate and read books. Consider adding rules in various languages, but especially in English, Chinese, Spanish, and Korean.

Biophilic Design

Biophilic design attempts to achieve the benefits of contact between people and nature and has long been documented for its health and wellbeing benefits (Hung & Chang, 2021). As indicated by the survey, many senior users enjoy (and benefit) from more greenery and natural features such as water, birds, and vegetation.

Biophilic Design-Related Recommendations for Non-Traditional Forms of Open Space (Plazas, Parklets, Vacant Lots)

- *Plazas, Parklets, and Vacant Lots:* Provide vegetation and flowers (“softscapes”) over concrete pavements (“hardscapes”). A ratio of 30% hardscapes to 70% softscapes is optimal. In areas with existing hardscapes such as plazas or deserted lots, planting garden beds and artificial turfs may be considered.
- *Plazas, Parklets, and Vacant Lots:* Plant mature trees that can provide shade to open space users.
- *Plazas, Parklets, and Vacant Lots:* Consider incorporating elements that promote nature sounds, such as water, breezes, birds, and windchimes.
- *Plazas, Parklets, and Vacant Lots:* Place benches and seating across from pleasing views from the open space (e.g. away from a parking lot view and towards a landscaped turf or raised garden bed)
- *Plazas, Parklets, and Vacant Lots:* Provide gardens with raised beds for easy visibility and so that seniors do not have to bend down to see them.

Active Recreation

A majority of survey respondents indicated that a major motivation facing open space use was that of active recreation. Given that walking is the easiest and most common type of exercise for seniors, open spaces should consider designs with walking paths that reach interesting destinations, with checkpoints along the way such as benches or other opportunities for both rest and exercise.

Active Recreation-Related Recommendations for Non-Traditional Forms of Open Space (Plazas, Parklets, Vacant Lots)

- *Plazas, Parklets, and Vacant Lots:* Provide walking paths on flat terrain made out of rubber or other non-slippery materials.
- *Plazas, Parklets, and Vacant Lots:* Place destination points at the end of paths to encourage people to reach them (signage describing flowers, exercise equipment, areas for recreational classes).

- *Plazas, Parklets, and Vacant Lots*: Programmatic design: For new open spaces, request the support from pre-existing recreational groups such as the ones that already meet at Peter F. Schabarum Park as a way of encouraging use of new open spaces.
- *Plazas, Parklets, and Vacant Lots*: Provide low-impact exercise equipment.
- *Plazas, Parklets, and Vacant Lots*: Provide organized senior-friendly activity classes.

Activating Plazas

A couple of design elements could help improve and activate spaces within existing plazas. The following recommendations stem from what seniors in the community perceived as enhancing their experience of open spaces:

- Increase greenery in areas of the plaza, so they can be clearly seen by passers-by (Elements: Control, Access, Biophilic Design).
- Provide adequate lighting to secure visibility and to improve security (Element: Safety)
- Reduce traffic sounds and other environmental nuisances through forms of trees, water sounds, or sound barriers (Elements: Safety)
- Provide adequate benches and picnic tables, with the added bonus of sensory elements to look at (e.g. greenery) (Elements: Control, Biophilic Design)
- Provide walking paths leading to the open space (Elements: Active Recreation, Access)
- Build structures that strongly encourage someone to sit down and take a moment to rest (e.g. fountain, statues) (Elements: Access)



A rendering depicting how activating a vacant area in Pacific Plaza in Rowland Heights could look like.

Activating Parklets

Incorporating parklets that have seating, greenery, and/or tables that serve nearby restaurants and cafes can be very effective. One possibility may be activating pre-existing spaces used by restaurants by encouraging the use as public parklets. Such spaces refer to the use of temporary tarps that were set out as a result of COVID-19 indoor dining restrictions, which incentivized many businesses to set up seating for customers outdoors.

- Consider legible signage to encourage the public (not just restaurant or cafe diners) to utilize the space.
- Consider providing shade through gazebos, trellises, or natural greenery.
- For greater security, consider implementing alongside traffic calming measures (curb bulb-outs) in the vicinity of parklets.


Activating Vacant Lots

The following recommendations can be incorporated on these parcels.




- Pocket Park - a Pocket Park is a mini parcel of land that would allow the current owner to own the land while creating temporary activation of the space. Areas that were once unseen and unused can become activated through pocket parks.
- Dog park: Several seniors mentioned going to the park with dogs or pets. The significance of dog parks is two-fold: social interaction with humans and natural pleasure for dogs. Most dog parks in Rowland Heights and Hacienda Heights are located inside condominium complexes and other private residential communities. Providing public dog parks would be a great opportunity to extend forms of open space.
- Tot-lots: These mini playgrounds for children can be equipped with additional exercise equipment, sitting areas, and walking paths for adults.

Affordability and Feasibility Guide: Building an Open Space on a \$3000 Budget

Most open space projects cost about \$15,000-20,000 on average. Below is an estimate of what an affordable open space project would cost while encompassing the six elements.

| | Plazas | Parklets | Vacant Lots |
|------------------|--|--|---|
| Element: Control | <p>Provide at least 2 square feet signs in different languages introducing and welcoming access to the open space.</p> <p><u>English:</u> “Welcome to this space! Feel free to use it during your stay here.”</p> <p><u>Spanish:</u> Bienvenidos a este espacio. No se sientan libres de usarlo durante su estadía aquí</p> <p><u>Korean:</u> 이 공간에 오신 걸 환영합니다! 여기 머무르는 동안 자유롭게 사용하세요</p> <p>Cost: 5-10 sq ft with minimal electronics: \$50-200 per sign.</p> | <p>Provide at least 2 square feet signs in different languages welcoming access to the open space.</p> <p><u>English:</u> “Welcome to this space! Feel free to use it during your stay here.”</p> <p><u>Chinese:</u> 欢迎来到这个空间！在此逗留期间请随意使用。</p> <p><u>Vietnamese:</u> Chào mừng đến với không gian này! Cứ dùng thoải mái trong khi ở lại đây.</p> <p>Cost: 5-10 sq ft with minimal electronics: \$50-200 per sign.</p> | <p>Provide adequate lighting to secure visibility. Place lighting in close proximity to sidewalks near the lots.</p> <p>Cost for string lights: \$59 (48 ft)</p> |
| Element: Safety | <p>If you live in an unincorporated area of LA County, a building permit is not required to construct a fence less than 6 feet in height.</p> <p>Consider using a few panels to block the plaza traffic from the open space.</p> <p>Fence: One 6x8 ft panel: ~\$100. * 3 = \$300.</p> | <p>Manual retractable awning for business corridors: \$~200-300.</p>  | <p>Place trash cans and single seat benches to increase greater cleanliness and individuals sleeping in the space.</p> <p>Trash can cost: \$150 Single seat benches: \$30 per chair * 5 = \$150</p> |
| Element: Access | <p>Provide adequate lighting to secure visibility. Place lighting in plazas well traveled by seniors and in close proximity to sidewalks within the plazas.</p> <p>Cost for string lights: \$59 (48 ft)</p> | <p>Place parklets on sidewalks that are well utilized by seniors, especially where roads may suddenly become hilly, so that the space can be a place to briefly rest.</p> | <p>Consider using the space to hold various events to attract seniors (i.e.- farmers markets, yoga, taichi, outdoor health clinics).</p> |

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| | Plazas | Parklets | Vacant Lots |
|-------------------------------|---|--|---|
| Element: Social Support | <p>Permanent seating: Single seat benches <u>(with backs and surface mount)</u>: \$425.71 per bench * 2 = \$851.42</p> <p>Permanent seating: <u>Circle backless park bench (concrete)</u>: \$101 per bench * 5 = \$505</p> <p>Short term seating (Portable): <u>Plastic Outdoor Chairs</u> \$14.98 per chair * 10 = \$150</p> | <p>Consider wooden benches that face each other and wide tables for activities. \$320 * 2 = \$640.</p> | <p>Place an outdoor cork bulletin board for local information exchange. Cost: \$130</p> <p>Permanent seating: Single seat benches <u>(with backs and surface mount)</u>: \$425.71 per bench * 2 = \$851.42</p> <p>Permanent seating: <u>Circle backless park bench (concrete)</u>: \$101 per bench * 5 = \$505</p> <p>Short term seating (Portable): <u>Plastic Outdoor Chairs</u> \$14.98 per chair * 10 = \$150</p> |
| Element: Biophilic Design | <p>Incorporate temporary structures with plant components (giant pot) to separate the space from the parking lot and nearby street traffic.</p> <p>Cost: \$150 for one plant * 3 = \$450</p> | <p>Incorporate artificial lawn turfs. Consider asking business corridors and residents for additional plants, shrubs they may want to see.</p> <p>Cost: Artificial lawn turf: \$200.</p> | <p>If the terrain in the vacant lot is dirt-based (not concrete), consider adding native plants, by asking the community to come together for a gardening day.</p> <p>California drought resistant native plants: Santa Barbara Ceanothus, Golden Yarrow, Scarlet Bugler, Deergrass.</p> <p>Cost: \$25 for one deergrass * 4 = \$100.</p> |
| Element: Active Recreation | <p>Walking paths made out of rubber or other non-slippery materials</p> <p>2.5" Thick Solid Color Title: 72 Fall Height: \$35.88 * 50= \$1794</p> | <p>Walking paths made out of rubber or other non-slippery materials to seating areas</p> <p>2.5" Thick Solid Color Title: 72 Fall Height: \$35.88 * 50= \$1794</p> | <p>Walking paths made out of rubber or other non-slippery materials</p> <p>Cost: \$200</p> <p>2.5" Thick Solid Color Title: 72 Fall Height: \$35.88 * 50= \$1794</p> |
| Rendering |  |  |  |
| Expected Cost | \$2803 - \$3654.42 | \$2884 - \$3134 | \$2383 - 3084.42 |

Appendix

Appendix A: Keyword Tweets from Twitter

| Link | Creator | Tweet | Status | Keyword | Open Space | HH or RH | Features seniors? |
|---|---|--|-----------|----------------------|-----------------------------------|------------------|-------------------|
| https://twitter.com/jessieliu/status/1093812232918577152?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | https://twitter.com/jessieliu | I went on a park hike with my parents at Schabarum Park after visiting the temple for Chinese New Year. Great sunny weather and caught a view of the snowy mountains in the distance. | 2/8/2019 | Temple,Hike, Parents | Schabarum Park | Hacienda Heights | Yes |
| https://twitter.com/lapublichealth/status/1174377492871671809?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @lapublichealth | Join us Saturday for a Resource Fair hosted by @supjanicehahn & Sup @hildasolis for residents living near #Quemetco. Free blood lead testing, soil sampling info, health resources. #HaciendaHeights Community Center, 1234 Valencia Ave Sat 9/21 10:00-2:00 | 9/18/2019 | Health,Quemetco | Hacienda Heights Community Center | Hacienda Heights | No |
| https://twitter.com/lapublichealth/status/1175413546839969797?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @lapublichealth | TODAY in #HaciendaHeights | 9/21/2019 | Health,Quemetco | | Hacienda Heights | No |
| https://twitter.com/LACoSheriff/status/1213671160497369089?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @LACoSheriff | I want to thank the gracious organizers of the 2020 Interfaith Prayer for World Peace for allowing me to speak today.I was deeply moved by the ceremony at the Hsi Lai Temple in #HaciendaHeights, which brought together leaders from major faiths to pray for peace. #LASD #SheriffV | 1/4/2020 | Temple | Temple | Hacienda Heights | Yes |
| https://twitter.com/CSSDLA/status/1237077514335342592?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @CSSDLA | Attention Employers & Payroll Professionals! Be sure to register for our #FREE employer workshop this Wednesday 3/11/20 at #RowlandHeights Community Center! Visit http://cssd.lacounty.gov and register today! #LACounty #SupportLA | 3/9/2020 | community workshop | Rowland Heights Community Center | Rowland Heights | |
| https://twitter.com/KennyUong/status/1236181042358181888?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @KennyUong | In 2011, St. John Vianney Catholic Church in #HaciendaHeights was burned in an act of arson. Today, I got to visit the new church that was dedicated in 2018 to replace it. Folded handsChurch #SanGabrielValley | 3/26/2020 | Crime | St. John Vianney Catholic Church | Hacienda Heights | No |
| https://twitter.com/KennyUong/status/1247745129198137347?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @KennyUong | Thanks Google Maps for reminding me about the trip to #HaciendaHeights I went on last month! #SGV | 4/7/2020 | Hike | Schabarum Park | Hacienda Heights | No |

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|---|--|--|-----------|------------------|---------------------------------|----------------------------------|----|
| https://twitter.com/Bit23/status/1262529212465864705?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @Bit23 | See you soon#baller #sportsman #throw #championship #espn #striveforgreatness #ballup #bball #dubnation #hoop #handles #basketball #instaball #nbplayoffs #park #clouds #sportphotography #corona #haciendaheights #losangeles | 5/18/2020 | Basketball | Schabarum Park | Hacienda Heights | No |
| https://twitter.com/MoveSgv/status/1268273786811342848?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @moveSGV | Peaceful Protest in ROWLAND HEIGHTS • Saturday • 12pm *Starting location has been changed by organizer, sorry for the inconvenience!* | 6/3/2020 | Peaceful Protest | Schabarum Park | Rowland Heights | |
| https://twitter.com/DylanTr78991954/status/1268752083869528065?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | Dylan Tran Dylan Tran @DylanTr78991954 | @SAConScene@SAConScene A protest will be taking place in Rowland Heights on June 6 at 12PM starting at Gloria Heer Park and ending at Schabarum Park. #Rowlandheights #protest2020 | 6/4/2020 | Peaceful Protest | Gloria Heer Park,Schabarum Park | Rowland Heights | |
| https://twitter.com/ashleycamillee/status/1269490198137602049?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @ashleycamillee | Protest ended at Schabarum park where we laid flowers over the names of those who need us to fight for their justice. Also, shoutout to Ron & Alicia floral shop for passing out flowers!!! Bouquet | 6/4/2020 | Peaceful Protest | Schabarum Park,Gloria Heer Park | Rowland Heights | |
| https://twitter.com/kentschen/status/1269409734760599552?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @kentschen_ | Rowland Heights "Flowers for Floyd" march down Fullerton Rd #RowlandHeights | 6/6/2020 | Peaceful Protest | Gloria Heer Park,Fullerton Road | Rowland Heights | |
| https://twitter.com/SGV_PA/status/1269402314332205056?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @SGV_PA | #HaciendaHeights and #RowlandHeights community in support of #BlackLivesMatter. #DefendBlackLives #DefundThePolice #SGV #SanGabrielValley #SGVProgressiveAction | 6/6/2020 | Peaceful Protest | | Rowland Heights,Hacienda Heights | |
| https://twitter.com/Airsquad9/status/1270568817941454848?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @airsquad9 | Copters 11, 12 and 16 from | 6/9/2020 | Brush Fire | Schabarum Park | Hacienda Heights | No |
| https://twitter.com/lidiotic/status/1268274120141094912?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @lidiotic | Peaceful Protest in ROWLAND HEIGHTS • Saturday • 12pm *Starting location has been changed by organizer, sorry for the inconvenience!* | 7/3/2020 | Peaceful Protest | Gloria Heer Park | Rowland Heights | No |
| https://twitter.com/kentschen/status/1270562664196870144?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @kentschen_ | Brush fire on the Schabarum-Skyline trail in #HaciendaHeights. Set off by fireworks | 7/9/2020 | Brush Fire | Schabarum Park | Hacienda Heights | No |
| https://twitter.com/ABC7/status/1270563611576946688?s=20&t=QCwIzcnJuDIJaCibVTWlNQ | @ABC7 | #BREAKING LA County Firefighters battling 3-acre brush fire near Colima Rd & Punta Del Este Dr in #HaciendaHeights | 7/27/2020 | Brush Fire | Colima Rd | Hacienda Heights | No |

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|---|---------------------------------------|--|-----------|--------------------------|---------------------------------|-----------------------------------|-----|
| https://twitter.com/scottburtknx/status/1294409872809680897?s=20&t=QCwzcnJuDIJaCibVTWINQ | @scottburtknx | LA County Fire Helicopter making a drop on the #BrushFire in #HaciendaHeights | 8/14/2020 | Brush Fire | | Hacienda Heights | No |
| https://twitter.com/engineco16/status/1294408412655017984?s=20&t=QCwzcnJuDIJaCibVTWINQ | @engineco16 | #GroveFire | 8/14/2020 | Brush Fire | | Hacienda Heights | No |
| https://twitter.com/vlgrcat/status/1350957603984125956?s=20&t=QCwzcnJuDIJaCibVTWINQ | @vlgrcat | Great time at the park with @mynameisandytoo and our pup Bella! Face throwing a kiss | 1/17/2021 | Pet | Schabarum Park | Hacienda Heights | No |
| https://twitter.com/CSSDIA/status/1237077514335342592?s=20&t=QCwzcnJuDIJaCibVTWINQ | @TheNewsBrian | A man died in a shooting reported just before 2:40 a.m. in the area of Colima and Fullerton roads in #RowlandHeights, according to the LASD. https://local.nixle.com/alert/8651422/ | 4/11/2021 | Crime | Fullerton Road | Rowland Heights | |
| https://twitter.com/TheNewsBrian/status/1386562105579511808?s=20&t=QCwzcnJuDIJaCibVTWINQ | @TheNewsBrian | A man died and another was wounded in an apparently gang-related shooting just after 7 p.m. in the 16000 block of Sigman Street in #HaciendaHeights, per LASD. https://local.nixle.com/alert/8679388/ | 4/25/2021 | Crime | William Steinmetz Park | Hacienda Heights | No |
| https://twitter.com/lacounty_parks/status/1395845153097613312?s=20&t=QCwzcnJuDIJaCibVTWINQ | Los Angeles County Parks & Recreation | Wag your tails and clap your paws! The second dog park in #LACountyParks is on its way. We're excited to break ground on Dalí's Dog Park at Peter F. Schabarum Park. Thanks | 5/21/2021 | Pet | Schabarum Park | Hacienda Heights | No |
| https://twitter.com/LASDHO/status/1397346997267574786?s=20&t=QCwzcnJuDIJaCibVTWINQ | @LASDHQ | *TOMORROW* Join the #LASD @CouncilLasd on Wed, 05/26/21 from 9:00 a.m. - 3:00 p.m. for a Community COVID Vaccination Clinic in #HaciendaHeights. Location: St. John Vianney Church, 1345 Turnbull Canyon Rd., Hacienda Heights, 91745. | 5/26/2021 | Health, Community Clinic | St. John Vianney Church | Hacienda Heights | No |
| https://twitter.com/RepYoungKim/status/1411769177036238851?s=20&t=QCwzcnJuDIJaCibVTWINQ | @RepYoungKim | Happy #4thofJuly ! Great to see so many friends in our #HaciendaHeights community this morning as we celebrate #IndependenceDay. Flag of United States | 7/4/2021 | Parade | Los Altos Gym | Hacienda Heights | No |
| https://twitter.com/sinosdejan_/status/1405013595310608387?s=20&t=QCwzcnJuDIJaCibVTWINQ | @sinosdejan_ | Pls RT!!! LA PUENTE Food Pantry!!! LA County Parks giving lunch between 12-1 & snacks 3-4pm to ppl 18 & under! #haciendaheights #lapuente #whittier | 7/15/2021 | Food Distribution | Schabarum Park, Pathfinder Park | Rowland Heights, Hacienda Heights | Yes |
| https://twitter.com/jarodlucash/status/1405761671449124875?s=20&t=QCwzcnJuDIJaCibVTWINQ | @jarodlucash | Proud of all my young guys at Los Altos. A special season and a great group of guys, glad I was able to witness the playoffs in person. Brought a lot of pride to everyone in the city. #HaciendaHeights | 7/17/2021 | Basketball | Los Altos Gym | Hacienda Heights | No |

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|---|---------------|---|------------|-------------------|-----------------------------|------------------|----|
| https://twitter.com/SanDistricts/status/1422597529821089796?s=20&t=QCwIzcnJuDIJaCibVTWINQ | @SanDistricts | FREE Household Hazardous Waste & #EWaste Roundup on Saturday, Aug 7 in #HaciendaHeights at Dibble Adult School (1600 Pontenova Avenue) from 9am-3pm. Bring paints, household cleaners, old computers, TVs, microwaves & more. Read more | 8/3/2021 | Community Recycle | Dibble Adult School | Hacienda Heights | No |
| https://twitter.com/rayJ_DBU25/status/1434609840039489536?s=20&t=QCwIzcnJuDIJaCibVTWINQ | @rayJ_DBU25 | Some serious talent in the | 9/5/2021 | Basketball | Los Altos Gym | Hacienda Heights | No |
| https://twitter.com/SanDistricts/status/1470443049008320513?s=20&t=QCwIzcnJuDIJaCibVTWINQ | @SanDistrict | FREE Household Hazardous Waste & #EWaste Roundup on Sat, Dec 18 in #RowlandHeights at John A. Rowland High School (2000 S Otterbein Ave) from 9 am-3 pm. Bring paints, sharps, household cleaners, old computers, TVs, microwaves & more. | 12/13/2021 | Community Recycle | John A. Rowland High School | Rowland Heights | |
| https://twitter.com/LACoFDPIO/status/1475631860772339715?s=20&t=QCwIzcnJuDIJaCibVTWINQ | @LACoFDPIO | WATER RESCUE 2000 blk Wickshire Ave. #HaciendaHeights One adult female was safely rescued from the Hacienda Channel and is being evaluated by #LACoFD paramedics. For your safety, please remain clear of these dangerous flood control channels while it is raining. | 12/27/2021 | Flood | | Hacienda Heights | No |
| https://twitter.com/MaseHater/statuses/1482760514862080002 | @MaseHater | @NYTMetro @RubyGonzales2 Do you know have any info about the fatal carjacking attempt at Schabarum Park yesterday in rowland heights? | 1/16/2022 | Crime,Vehicle | Schabarum Park | Hacienda Heights | No |
| https://twitter.com/SkyCirclesLA/statuses/1486475908760309764 | @SkyCirclesLA | N65831, a Cessna 172-S, is circling over La Habra Heights at 2550 feet, speed 82 MPH, 1.0 miles from Schabarum Regional Park https://t.co/EyXmRO09cN https://t.co/czD9zW4ewu | 1/26/2022 | Crime,Vehicle | Schabarum Park | Hacienda Heights | No |

Appendix B: Open Space Surveys

| English | Korean | Spanish |
|--|--|---|
| <p>Access to Public Facilities and Open Space in Your Neighborhood</p> <p>Para una versión en español, visite: https://airtable.com/shrSWgEeaxRpsAtzE</p> <p>The Los Angeles Planning Department is interested in hearing your feedback on public facilities! COVID-19 has hit our communities hard, and we are interested in knowing which types of public spaces have been used throughout this season.</p> <p>This work will inform a capstone project by Jane Lee with the UCLA Luskin School of Regional Planning, and will help provide insights that will aid services for underserved senior populations. All answers will be kept confidential and only used for internal purposes.</p> <p>Three lucky respondents will be selected at random to receive \$10 Starbucks gift cards. Thank you!</p> <p>For any questions, please reach out to Jane Lee at jlee@planning.lacounty.gov.</p> <p>Please provide your name. *</p> <p>What is your age range? *</p> <ul style="list-style-type: none"> Under 60 65-74 75-84 85+ <p>Select the option that best applies to you (select all that apply): *</p> <ul style="list-style-type: none"> I live in Rowland Heights I live in Hacienda Heights I frequently visit Rowland Heights None of the above <p>Do you have a family member in your home who is at least 65 years old? *</p> | <p>인근 지역의 공공 시설 및 개방 공간 이용 (주변 설문 조사)</p> <p>엘에이 카운티 (LA County) 기획부에서 공공 시설에 대한 귀하의 의견을 듣고 싶어 합니다! 코로나19는 지역사회에 큰 타격을 입혔으며, 이번 시즌 동안 어떤 유형의 공공 공간이 사용되었는지에 관심이 있습니다.</p> <p>이 연구는 UCLA 러스킨 지역 계획 학교의 Jane Lee 의 캡스톤 프로젝트에 의해 사용될 것이며, 소외된 노인 인구들을 위한 서비스를 제공하는 데 도움을 줄 것입니다. 질문은 완료하는 데 10분 이상 소요되지 않습니다. 모든 답변은 기밀로 유지되며 내부 용도로만 사용될 것입니다.</p> <p>3명의 응답자들에게 \$10 스타벅스 (Starbucks) 기프트 카드를 드리겠습니다. 감사합니다!</p> <p>궁금한 점이 있으시면 Jane Lee (jlee@planning.lacounty.gov)에게 문의해 주십시오.</p> <p>이름을 입력하십시오. *</p> <p>당신의 연령대는 어떻게 됩니까? *</p> <ul style="list-style-type: none"> 60세 미만 60-64 65-74 75-84 85+ <p>가장 적합한 옵션을 선택하십시오(해당하는 항목 모두 선택). *</p> <ul style="list-style-type: none"> 나는 Rowland Heights에 산다. 나는 Hacienda Heights에 산다. Rowland Heights를 자주 방문합니다. Hacienda Heights를 자주 방문합니다. 위의 항목들 중 해당 사항 없음 <p>당신의 집에 65세 이상의 가족 구성원이</p> | <p>Acceso a instalaciones públicas y espacios abiertos en su vecindario</p> <p>¡El Departamento de Planificación de Los Ángeles está interesado a escuchar sus comentarios sobre las instalaciones públicas! El COVID-19 ha golpeado duramente a nuestras comunidades y nos interesa saber qué tipo de espacios públicos se han utilizado a lo largo de esta temporada.</p> <p>Este trabajo informará un proyecto final de Jane Lee con la Escuela de Planificación Regional UCLA Luskin, y ayudará a proporcionar información que ayudará a los servicios para las poblaciones de adultos mayores desatendidas. Las preguntas en este formulario no deben tomar más de 10 minutos para completarse. Todas las respuestas se mantendrán confidenciales y solo se utilizarán para fines internos.</p> <p>Tres encuestados afortunados serán seleccionados al azar para recibir tarjetas de regalo de Starbucks de \$10. ¡Gracias!</p> <p>Si tiene alguna pregunta, comuníquese al correo electrónico de Jane Lee: Jane Lee en jlee@planning.lacounty.gov.</p> <p>Proporcione su nombre. *</p> <p>¿Cuál es su extensa de edad? *</p> <p>Select an option</p> <p>Seleccione la opción que mejor se aplique a usted (seleccione todas las que correspondan): *</p> <ul style="list-style-type: none"> Yo vivo en Rowland Heights yo vivo en Hacienda Alturas Frecuentemente visito Rowland Heights Frecuentemente visito Hacienda Heights Ninguna de las anteriores <p>¿Tiene algún familiar en su casa que tenga por lo</p> |

STEPS: Spaces Through the Eyes and Perceptions of Seniors

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| <ul style="list-style-type: none"> • Yes • No <p>What types of services do you currently use outdoors at public places? *</p> <p>Select all that apply.</p> <ul style="list-style-type: none"> • Restrooms • Playing Fields • Large green areas • Walking Paths/Areas • Exercise Equipment • Playground in my neighborhood • BBQ Pits • Picnic Tables • Other <p>During the pandemic, is there a type of public open space you have frequented more often than others? *</p> <p>Below are all examples of open spaces - any open piece of land that is undeveloped (has no buildings or other built structures) and is accessible to the public.</p> <ul style="list-style-type: none"> • Large parks • The park in my neighborhood • Pocket Parks (mini-parks, small outdoor spaces) • Plazas • Trails • Neighborhood streets and sidewalks • Pathways • Other (such as senior centers) <p>Can you provide the name of the public open space selected in the previous question? *</p> <p>What are the reasons that you go to the public</p> | <p>있습니까? *</p> <ul style="list-style-type: none"> • 예 • 아니요 <p>현재 야외 공개 장소에서 어떤 유형의 서비스를 이용/방문하고 계십니까? *</p> <ul style="list-style-type: none"> • 화장실 • 잔디 구장 • 넓은 녹지 • 산책로/구역 • 운동 기구 • 우리 동네 놀이터 • 바비큐 시설 • 피크닉 테이블 • 기타 <p>팬데믹 기간 동안, 다른 곳보다 더 자주 방문했던 공공 개방 공간의 유형이 있습니까? *</p> <p>(아래는 개방된 공간의 모든 예입니다 - (건물이나 다른 건축물이 없는) 아직 미개발된 대종이 접근할 수 있는 개방된 토지입니다.)</p> <ul style="list-style-type: none"> • 대형 공원 • 우리 동네 공원 • 포켓 파크 (미니 공원, 소규모 야외 공간) • 광장 • 산책길 • 근린 거리 및 보도 (인도) • 경로 길 • 기타 (예: 경로당) <p>6번 문제에서 선택한 당신이 자주 다니는 공공 개방 공간의 이름을 알려 주세요 *</p> <p>위에 명시된 공공 개방 공간에 방문하는 이유는 무엇입니까? *</p> <ul style="list-style-type: none"> • 활동적인 레크리에이션(걷기, 운동, 스포츠 경기)을 위해 • 수동적인 레크리에이션(자연을 | <p>menos 65 años? *</p> <ul style="list-style-type: none"> • Si • No <p>*¿Qué tipo de servicios utiliza actualmente/visita al aire libre en espacios públicos abiertos? *</p> <ul style="list-style-type: none"> • Baños • Campos de juego • Amplias áreas verdes • Senderos/áreas para caminar • Equipo de ejercicio • Patio de recreo en mi vecindad • Asadores • Mesa de campestre • Otro <p>Durante la pandemia, ¿hay algún tipo de espacio abierto al público que haya visitado con más frecuencia que otros?</p> <ul style="list-style-type: none"> • Grandes parques • El parque de mi vecindad • Pocket Parks (miniparques, pequeños espacios al aire libre) • Plazas • Caminos • Calles y aceras de las vecindades • Caminos • Otros (por ejemplo, centros para personas mayores) <p>*¿Puede proporcionar el nombre del espacio público al público seleccionado en la pregunta anterior?</p> <p>*¿Cuáles son las razones por las que va al espacio abierto público especificado anteriormente (marque todas las que correspondan)? Para la recreación activa (para caminar, hacer ejercicio y practicar deportes) *</p> <ul style="list-style-type: none"> • Para recreación pasiva (para disfrutar de la naturaleza, observar a la gente o los deportes, leer un libro) • Para reunirse/socializar con otros (picnics, conocer gente) |
|---|--|--|

STEPS: Spaces Through the Eyes and Perceptions of Seniors

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| <p>open space specified above (mark all that apply)? *</p> <ul style="list-style-type: none"> For active recreation (to walk, exercise, and play sports) For passive recreation (to enjoy nature, watch people or sports, read a book) To meet/socialize with others (picnics, meeting people) To be close to nature To do some errands (e.g. shop, reach services) Other (please explain) <p>How often do you access open space in your neighborhood? *</p> <ul style="list-style-type: none"> Rarely (once a month or less) 2-3 times a month Once per week Very often (multiple times a week) Every day <p>How do you get to open spaces in your neighborhood? *</p> <p>(Open spaces can be parks, plazas, pathways)</p> <ul style="list-style-type: none"> Walk Drive Public Transportation Bike Other (please list) <p>Which of the following would make you use public open space more frequently? *</p> <ul style="list-style-type: none"> The presence of security at the space (e.g. security guards, surveillance cameras) Open space signs (park signs) in different languages Planned transit routes leading to the open space More open space in your neighborhood More programs and organized activities at the space (e.g. festivals, | <p>즐기고, 사람이나 스포츠를 보고, 책을 읽는 것을 위해</p> <ul style="list-style-type: none"> 다른 사람과 만나거나 친해지기(소풍, 사람 만나기) 신체적 또는 정신적 건강상의 이점 자연과 가까워지기 위해 심부름(예: 쇼핑, 서비스)을 위해 기타(설명해 주십시오) <p>이전 질문에서 지정한 공공 개방 공간을 활용하는 다른 이유를 명시해 주십시오. *</p> <p>주변의 공공 개방 공간 공간에 얼마나 자주 액세스합니까? *</p> <ul style="list-style-type: none"> 거의 없음 (월 1회 이하) 월 2~3회 일주일에 한번 매우 자주 (주일에 여러번) 매일 <p>동네에서 열린 공간을 어떻게 찾습니까?</p> <p>(열린 공간은 공원, 광장, 길 등이 될 수 있습니다.)</p> <ul style="list-style-type: none"> 걸기 운전 대중교통 자전거 기타 (목록에 표시) <p>다음 중 공공 개방 공간을 더 자주 사용하게 하는 것은 무엇입니까? *</p> <ul style="list-style-type: none"> 공간의 보안 존재(예: 경비원, 감시 카메라) 다른 언어의 열린 공간 표지판(파크 표지판) 개방된 공간으로 이어지는 계획된 환승 경로 이웃에 더 많은 열린 공간 제공 공간에서 더 많은 프로그램 및 활동(예: 축제, 전시, 야외 교실) 유지 보수 및 청결 개선 기타 (설명해주세요) | <ul style="list-style-type: none"> Para beneficios de salud física o mental Para estar cerca de la naturaleza Para hacer algunos mandados (por ejemplo, comprar, llegar a servicios) Otro (por favor explique) <p>¿Con qué frecuencia accede a espacios abiertos públicos en su vecindario? *</p> <ul style="list-style-type: none"> Rara vez (una vez al mes o menos) 2-3 veces al mes Una vez por semana Muy a menudo (varias veces a la semana) Cada día <p>*¿Cómo llegas a los espacios abiertos en tu vecindad (Los espacios abiertos pueden ser parques, plazas, caminos) *</p> <ul style="list-style-type: none"> Caminar Conducir Transporte público Bicicleta Otro (por favor enumere) <p>¿Cuál de los siguientes haría que usara el espacio abierto público con más frecuencia? *</p> <ul style="list-style-type: none"> La presencia de seguridad en el espacio (por ejemplo, guardias de seguridad, cámaras de vigilancia) Letreros de espacios abiertos (letreros de parques) en diferentes idiomas Rutas de tránsito planificadas que conducen al espacio abierto. Más espacio abierto en tu vecindad Más programas y actividades organizadas en el espacio (por ejemplo, festivales, exhibiciones de arte, clases al aire libre) Mejor mantenimiento y limpieza. Otros (Por favor especifique) <p>¿Cuáles son los elementos FÍSICOS que le ayudarían a utilizar más espacios abiertos públicos en su comunidad? *</p> |
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STEPS: Spaces Through the Eyes and Perceptions of Seniors

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| <ul style="list-style-type: none"> art exhibits, outdoor classes) Better maintenance and cleanliness Other: please specify <p>What are the PHYSICAL elements that would help you to use more open space in your community? *</p> <ul style="list-style-type: none"> Outdoor chairs/benches Outdoor games (such as chess, mahjong) Exercise equipment Better lighting Availability of shaded areas Street lamps and overall brightness More trees Pedestrian oriented streets (with street benches, few cars, etc.) Better parking around public spaces Natural features (water, birds, vegetations) Public restrooms Using waterways as places for outdoor recreation Other: Please specify | <p>더 많은 열린 공간에 액세스 (접근 이용)할 수 있도록 다른 요소를 설명해주세요. *</p> <p>커뮤니티의 열린 공간을 더 많이 사용하는 데 도움이 되는 물리적 요소는 무엇입니까? *</p> <ul style="list-style-type: none"> 야외 의자/벤치 야외 게임 (예: 체스, 마작) 운동기구 더 나은 조명 음영 영역의 가용성 가로등 및 전체 밝기 더 많은 나무들 보행자 중심의 거리(가로 벤치 설치, 차량 수 감소 등) 공공장소 주변 주차 개선 자연적 특징(물, 새, 식물) 공중화장실 야외 레크리에이션 장소로 수로 이용 기타: 지정하십시오 | <ul style="list-style-type: none"> Sillas/bancos de exterior Juegos al aire libre (como ajedrez, mahjong) Equipo de ejercicio Mejor iluminación Disponibilidad de áreas sombreadas Farolas y luminosidad general Mas arboles Calles orientadas al peatón (con bancos en la calle, pocos autos, etc.) Mejor estacionamiento alrededor de los espacios públicos Elementos naturales (agua, pájaros, vegetación) Baños públicos Uso de cursos de agua como lugares para la recreación al aire libre Otros (especificar *Si yo): <p>¿Cuál de los siguientes le gustaría ver convertido en espacios abiertos públicos? (Nota: Espacio abierto es cualquier terreno abierto que no está desarrollado (no tiene edificios u otras estructuras construidas) y es accesible al público). *</p> |
| <p>Which of the following would you like to see being turned into open spaces? *</p> <p>Note: Open space is any open piece of land that is undeveloped (has no buildings or other built structures) and is accessible to the public.</p> | <p>다음 중 개방된 공간으로 전환되기를 원하는 것은 무엇입니까? *</p> <p>참고: 개방된 공간은 (건물이나 다른 건축물이 없고) 일반인이 접근할 수 있는 개방된 토지입니다.</p> | <ul style="list-style-type: none"> Terreno vacío Infraestructura no utilizada (por ejemplo, líneas de ferrocarril) Canales de drenaje Estacionamientos Otro (por favor explique) |
| <ul style="list-style-type: none"> Vacant land Unused infrastructure (e.g. railroad lines) Drainage Channels Parking Lots Other (please explain) | <ul style="list-style-type: none"> 공터 사용되지 않는 인프라(예: 철도선) 배수 채널 주차장 기타(설명해 주십시오) | <p>¿Está cerrado un servicio o instalación que desea ver en un parque/plaza/calle debido a COVID-19?</p> <ul style="list-style-type: none"> Si No |
| <p>Is a service or facility you wish to see in a park/plaza/pathway closed due to COVID-19? *</p> <ul style="list-style-type: none"> Yes No <p>If we need more information, can we reach out to you? *</p> | <p>공원/광장/거리에서 보고 싶은 서비스 또는 시설이 COVID-19로 인해 폐쇄되었습니까?</p> <ul style="list-style-type: none"> 예 아니요 <p>자세한 정보가 필요한 경우 귀하에게 문의할 수 있습니까?</p> | <p>Si necesitamos más información, ¿podemos comunicarnos con usted? *</p> <ul style="list-style-type: none"> Si No |

STEPS: Spaces Through the Eyes and Perceptions of Seniors

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| <ul style="list-style-type: none">• Yes• No <p>Please provide your email address or phone number below.</p> <p>(This is required if you would like to enter into the raffle for a \$10 Starbucks gift card).</p> | <ul style="list-style-type: none">• 예• 아니요 <p>당신의 이메일 주소나 전화번호를 아래에 제공해주세요.</p> <p>추첨에 제출하기 위해 필요합니다.</p> | |
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Appendix C: Survey Flyer on Facebook

UCLA Covid-19
Sponsored · 🌐

We want your feedback on public spaces in your community! 3 lucky survey responders will receive \$10 Starbucks gift card.

ARE YOU A SENIOR (65+) OR HAVE A FAMILY MEMBER WHO IS? WE WANT YOUR FEEDBACK!

SCAN THE QR CODE OR ACCESS THE LINK BELOW:
BIT.LY/SENIORSPACES
THREE RESPONDENTS WILL RECEIVE A \$10 STARBUCKS GIFT CARD.

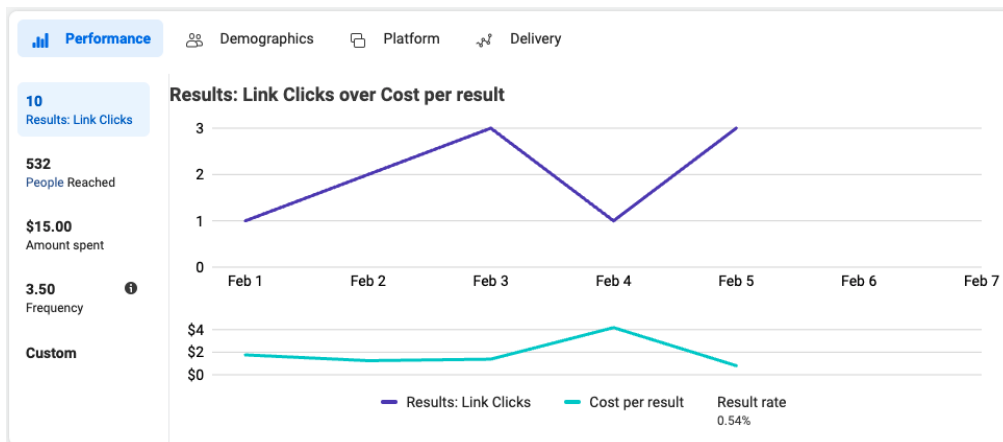
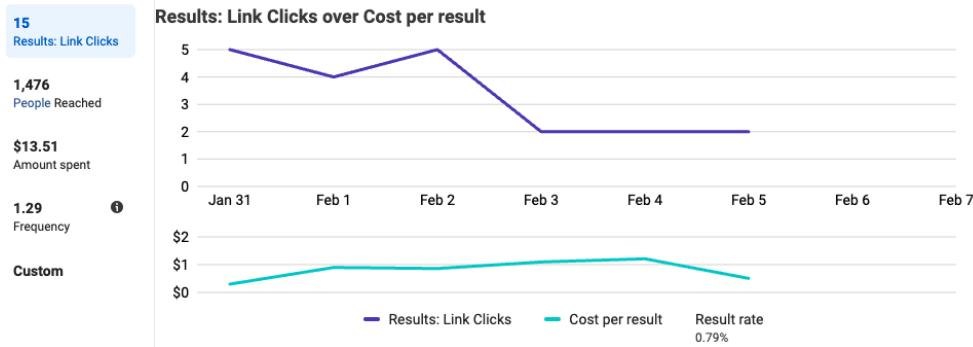
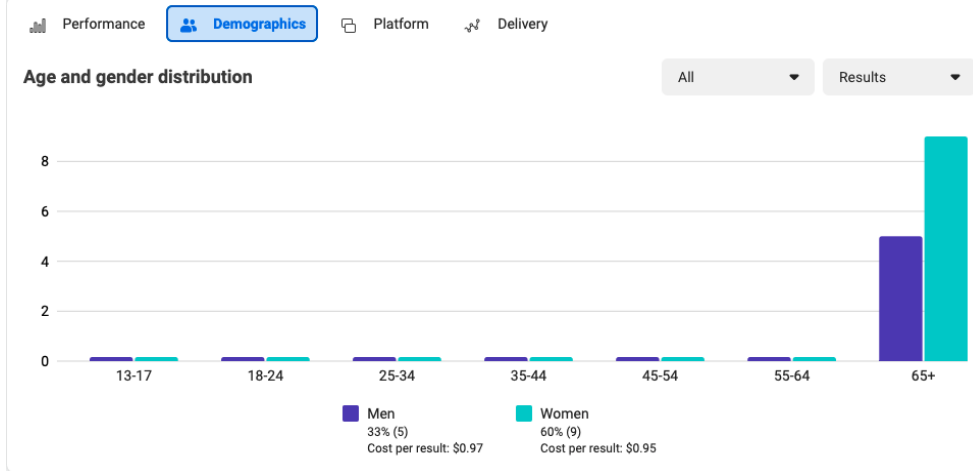
CREATING SENIOR & PANDEMIC FRIENDLY SPACES

BIT.LY/SENIORSPACES
Click **GET ACCESS** to take the survey. **GET ACCESS**

Like Comment Share

A preview of the Facebook Advertisement, which ran from 1/25/22- 2/05/22.

Appendix D: Results from the Facebook Ad Campaign



Appendix E: Site Visit (adapted from T.E.S.S.)

| | | |
|--|---|---|
| Date: February 3, 2022 | Pathfinder Regional Park (Rowland Heights) | Peter F. Schabarum Regional Park (Hacienda Heights) |
| Time of Day | 2:30pm | 3:15pm |
| Activities at park | <ul style="list-style-type: none"> - Walking - Basketball | Exercise (1) Walking (43) Running (3) Playground (20) Walking dog (11) Sitting at picnic bench (12) Bing (1) Hiking Trail (1) |
| Park qualities | Structured recreational spaces, high security due to presence of community center, designated recreational exercise equipment area, located on a hilltop with a view of the city. | Natural paths, little security monitoring, surrounded by nature on all sides. Abundance of greenery, tall tree canopies, and biodiversity (ie.- at least 5 different bird calls). |
| How many people are present at the park? | 23 | 92 |
| What are their discernible ages, gender, race/ethnicity characteristics? | Ethnicity: Asian (14); Hispanic (7); Caucasian (1); African American (1) Presumed gender: F11, M13 Predicted Age: Child (below 10): 2 20s: 6 30s: 2 40s: 3 50s: 3 60s: 4 70+: 1 | Ethnicity: Asian (44); Caucasian (23); Hispanic (23); African American (2) Presumed gender: F37/M55 Predicted Age: Child (Below 5): 3 Child (Below 10):12 20s: 16 30s:20 40s: 13 50s: 13 60s: 10 70+: 5 |
| What kinds of activities are they engaging in? | Walking (8) Basketball (3) Walking on phone (3) Exercise (2) Scooters (2) | Walking (43) Playground (20) Walking dog (11) Sitting at picnic bench (12) Running (3) |

STEPS: Spaces Through the Eyes and Perceptions of Seniors

| | | |
|--|--|---|
| | Running (1) Walking dog (1) | Exercise (1) Biking (1) Hiking trail (1) |
| Are park users alone, in small groups, or large groups? | Alone: (13) Group of 3: (2) Group of 4: (1) | Alone: (21) Group of 2: (17) Group of 3: (10) Groups of 4+: (1) |
| How have responses changed depending on day of week and time of day? | Observed during the day on a weekday (active school/work hours); will observe one more time at an alternative time | Observed during the day on a weekday (active school/work hours); will observe one more time at an alternative time |
| Are older adults over- and under represented at the parks compared to their distribution in the city's population? (Rowland Heights - 28.27%, and Hacienda Heights - 24.07%) | Those appearing to be 60 and older were 5 individuals out of the 23 observed. Such results in a 21.7% distribution, which is a slightly lower than the distribution of Rowland Heights' senior population. | Those appearing to be 60 and older were 5 individuals out of the 23 observed. Such results in a 16.3% distribution, which is lower than the distribution of Hacienda Heights' senior population. This suggests that the park may be underutilized by seniors. |

Works Cited

- Bedimo-Rung, A. L., Mowen, A. J., & Cohen, D. A. (2005). The significance of parks to physical activity and public health. *American Journal of Preventive Medicine*, 28(2), 159–168.
<https://doi.org/10.1016/j.amepre.2004.10.024>
- Berdejo-Espinola, V., Suárez-Castro, A. F., Amano, T., Fielding, K. S., Oh, R. R. Y., & Fuller, R. A. (2021). Urban green space use during a time of stress: A case study during the COVID-19 pandemic in Brisbane, Australia. *People and Nature*, 3(3), 597–609.
<https://doi.org/10.1002/pan3.10218>
- Bickenbach, J. (2015). WHO's Definition of Health: Philosophical Analysis. In T. Schramme & S. Edwards (Eds.), *Handbook of the Philosophy of Medicine* (pp. 1–14). Springer Netherlands. https://doi.org/10.1007/978-94-017-8706-2_48-1
- Braswell, M. (2019, December 5). An outdoor oasis for Angelenos in their golden years. *UCLA Newsroom*.
<https://newsroom.ucla.edu/stories/an-outdoor-oasis-for-angelenos-in-their-golden-years>
- Chamberlain, M. A., Buchanan, J. M., & Hanks, H. (1979). The arthritic in an urban environment. *Annals of the Rheumatic Diseases*, 38(1), 51–56. <https://doi.org/10.1136/ard.38.1.51>
- City of San Diego. (2021). *AGE FRIENDLY SAN DIEGO ACTION PLAN: Building a Vibrant and Equitable City for Everyone to Age Well*.
<https://www.sandiego.gov/sites/default/files/age-friendly-action-plan-sd-public-review.pdf>
- Contra Costa County Public Works Department. (2016). *Parklet Program Guideline—Creating Community Space: Converting Pavement to Parks*.
<https://www.contracosta.ca.gov/DocumentCenter/View/67928/Parklet-Guide-PDF---Lar>

ge-Document

County of Los Angeles Department of Parks and Recreation. (2020). *Los Angeles Countywide*

Comprehensive Parks and Recreation Needs Assessment. Governor's Office of Planning and Research, State of California.

<https://opr.ca.gov/docs/20200624-PlanningForHealth-LosAngeles-case-study.pdf>

de Oliveira Cunha, M. V. P., Costa, A. D. L., & da Costa Ireland, M. (2012). Ergonomic aspects to be considered in planning public spaces destined for elderly people. *Work, 41*, 3827–3833.

<https://doi.org/10.3233/WOR-2012-0685-3827>

Fabisiak, B., Jankowska, A., & Kłos, R. (2020). Attitudes of Polish Seniors toward the Use of Public Space during the First Wave of the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health, 17*(23), 8885.

<https://doi.org/10.3390/ijerph17238885>

Fingerman, K. L., Ng, Y. T., Zhang, S., Britt, K., Colera, G., Birditt, K. S., & Charles, S. T. (2021).

Living Alone During COVID-19: Social Contact and Emotional Well-being Among Older Adults. *The Journals of Gerontology: Series B, 76*(3), e116–e121.

<https://doi.org/10.1093/geronb/gbaa200>

Garces, M. (2021). *Lessons for Upgrading Los Angeles' Slow Streets: A Feasibility Study for*

Making the L.A. Slow Streets Program Permanent in a Post-COVID City. University of California, Los Angeles. <https://escholarship.org/uc/item/0fh918m4#main>

Gardner, P. J. (2011). Natural neighborhood networks—Important social networks in the lives of older adults aging in place. *Journal of Aging Studies, 25*(3), 263–271.

<https://doi.org/10.1016/j.jaging.2011.03.007>

Gavin, K. (2020, September 14). Loneliness Doubled for Older Adults in First Months of

COVID-19. *University of Michigan Health Lab*.

- Haagsman, B. (2021). How can Slow Streets work better for all ages and abilities? WALK San Francisco.
<https://walksf.org/2021/07/21/how-can-slow-streets-work-better-for-all-ages-and-abilities/>
- Heidinger, T., & Richter, L. (2020). The Effect of COVID-19 on Loneliness in the Elderly. An Empirical Comparison of Pre-and Peri-Pandemic Loneliness in Community-Dwelling Elderly. *Frontiers in Psychology, 11*, 585308. <https://doi.org/10.3389/fpsyg.2020.585308>
- Hung, S.-H., & Chang, C.-Y. (2021). Health benefits of evidence-based biophilic-designed environments: A review. *Journal of People, Plants, and Environment, 24*(1), 1–16.
<https://doi.org/10.11628/ksppe.2021.24.1.1>
- Korpilo, S., Kajosaari, A., Rinne, T., Hasanzadeh, K., Raymond, C. M., & Kytä, M. (2021). Coping With Crisis: Green Space Use in Helsinki Before and During the COVID-19 Pandemic. *Frontiers in Sustainable Cities, 3*, 713977. <https://doi.org/10.3389/frsc.2021.713977>
- LADOT: *Livable Streets: People St.* (2021). LADOT.
<https://ladotlivablestreets.org/programs/people-st>
- LaGrange, R., Ferraro, K., & Supancic, M. (1992). Perceived Risk and Fear of Crime: Role of Social and Physical Incivilities. *SAGE Journals*. <https://doi.org/10.1177/0022427892029003004>
- Levy-Storms, L., Chen, L., & Loukaitou-Sideris, A. (2018). Older Adults' Needs and Preferences for Open Space and Physical Activity in and Near Parks: A Systematic Review. *Journal of Aging and Physical Activity, 26*(4), 682–696. <https://doi.org/10.1123/japa.2016-0354>
- Lopez, B., Kennedy, C., Field, C., & McPhearson, T. (2021). Who benefits from urban green spaces during times of crisis? Perception and use of urban green spaces in New York City during the COVID-19 pandemic. *Urban Forestry & Urban Greening, 65*, 127354.
<https://doi.org/10.1016/j.ufug.2021.127354>

- Los Angeles County. (2016). *Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment*.
<https://lacountyparkneeds.org/wp-content/uploads/2016/06/FinalReport.pdf>
- Loukaitou-Sideris, A., Brozen, M., & Levy-Storms, L. (2014). Placemaking for an Aging Population: Guidelines for Senior-Friendly Parks. *UCLA: The Ralph and Goldy Lewis Center for Regional Policy Studies*. <https://escholarship.org/uc/item/450871hz>
- Loukaitou-Sideris, A., Levy-Storms, L., Chen, L., & Brozen, M. (2016). Parks for an Aging Population: Needs and Preferences of Low-Income Seniors in Los Angeles. *Journal of the American Planning Association*, 82(3), 236–251.
<https://doi.org/10.1080/01944363.2016.1163238>
- Low, S., Simpson, T., & Scheld, S. (2019). *Toolkit for the Ethnographic Study of Space (TESS)*. Public Space Research Group Center for Human Environments.
https://psrg.commons.gc.cuny.edu/files/2020/01/TESS_20191229-Copy.pdf
- Portacolone, E., Chodos, A., Halpern, J., Covinsky, K. E., Keiser, S., Fung, J., Rivera, E., Tran, T., Bykhovsky, C., & Johnson, J. K. (2021). The Effects of the COVID-19 Pandemic on the Lived Experience of Diverse Older Adults Living Alone With Cognitive Impairment. *The Gerontologist*, 61(2), 251–261. <https://doi.org/10.1093/geront/gnaa201>
- Rappe, E., Kivelä, S.-L., & Rita, H. (2006). Visiting Outdoor Green Environments Positively Impacts Self-rated Health among Older People in Long-term Care. *HortTechnology*, 16(1), 55–59.
<https://doi.org/10.21273/HORTTECH.16.1.0055>
- Sugiyama, T., Thompson, C. W., & Alves, S. (2009). Associations Between Neighborhood Open Space Attributes and Quality of Life for Older People in Britain. *Environment and Behavior*, 41(1), 3–21. <https://doi.org/10.1177/0013916507311688>

The LIFE Study Investigators* [*See Appendix for List of LIFE Study Investigators]. (2006). Effects of a Physical Activity Intervention on Measures of Physical Performance: Results of the Lifestyle Interventions and Independence for Elders Pilot (LIFE-P) Study. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 61(11), 1157–1165. <https://doi.org/10.1093/gerona/61.11.1157>

Trachsel, A., & Backhaus, N. (2011). *Perception and needs of older visitors in the Swiss National Park: A qualitative study of hiking tourists over 55*. <https://doi.org/10.5167/UZH-48300>

Wortzel, J. D., Wiebe, D. J., DiDomenico, G. E., Visoki, E., South, E., Tam, V., Greenberg, D. M., Brown, L. A., Gur, R. C., Gur, R. E., & Barzilay, R. (2021). Association Between Urban Greenspace and Mental Wellbeing During the COVID-19 Pandemic in a U.S. Cohort. *Frontiers in Sustainable Cities*, 3, 686159. <https://doi.org/10.3389/frsc.2021.686159>