Title
Parks for Seniors: Identifying Opportunity Sites in Los Angeles

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by Anastasia Loukaitou-Sideris,
Madeline Brozen & Wanmeng Ren

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Lewis Center
Communities · Transportation · Environment

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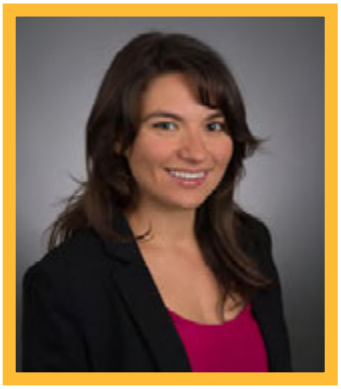
ABOUT THE AUTHORS

Anastasia Loukaitou-Sideris is Professor of Urban Planning, faculty fellow for the Lewis Center for Regional Policy Studies and Associate Dean of the UCLA Luskin School of Public Affairs. She holds degrees in architecture and urban planning, and her research focuses on the public environment of the city with a particular emphasis on its perspective users. She has conducted research on parks and open spaces, children's activities in public spaces, walking and biking on campus environments, environmental influences on transit crime, impacts of safety and security concerns on walking and physical activity, among others. Her books include *Urban Design Downtown: Poetics and Politics of Form, Sidewalks: Conflict and Negotiation over Public Space, Jobs and Economic Development in Minority Communities, Companion to Urban Design*, and *The Informal American City: Beyond Taco Trucks and Day Labor*.



Madeline Brozen is Associate Director of the UCLA Lewis Center for Regional Policy Studies. She holds degrees in urban studies and planning, and her research focuses on sustainable transportation and livable communities with a particular emphasis in performance measures and spatial analysis. She has conducted research about design innovations in street right-of-ways, the economic effect of open streets events in Los Angeles, and measurement techniques for sustainable transportation. Her work, including some in collaboration with Professor Loukaitou-Sideris, has received national recognition including two National Planning Achievement Awards for Best Practice from the American Planning Association and a Federal Highway Administration Exemplary Human Environment Initiative Award.

Wanmeng Ren holds a Master of Public Policy (2015) from the University of California, Los Angeles, as well as a Master in Public Administration (2013) and a B.S. in Materials Science (2011) from Zhejiang University, China. She is primarily interested in understanding how urban environment, community dynamics and health policy combine together to affect the health of individuals and communities. Her statistical and spatial research spans accessibility analysis, spatial statistics, and multi-level data analysis applied across a wide range of health care topics including senior health and services, integrated supportive health/housing models, and healthcare disparities. She is a recipient of Hal E. Martin Fellowship (2014-15) in Health and Social Policy, and her work has received the Luskin School Social Justice Award (2015).

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The Archstone Foundation's mission is to contribute towards the preparation of a society in meeting the needs of an aging population.

The Rosalinde and Arthur Gilbert Foundation is committed to providing and connecting resources to organizations that promote and improve health, education, economic and cultural opportunities to communities in California and Israel.

We hope this report helps to further the mission of both of these cherished organizations.

We acknowledge and thank **Community Health Councils**, the **Los Angeles Neighborhood Land Trust** and the **Los Angeles Department of Recreation and Parks** for supplying data for this effort. We hope this report can further their work in providing places for Angelenos to enjoy parks and open spaces.

Lastly, we would like to acknowledge the design work of Karen Thai for completing this report layout.

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INTRODUCTION

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The amount of accessible open space in Los Angeles varies widely by neighborhood and corresponds largely with economic prosperity (Loukaitou-Sideris & Stieglitz, 2002). Low-income neighborhoods in densely populated areas of Los Angeles have less than one acre of park space per 1,000 residents, while wealthier areas have over 100 acres per 1,000 residents (The City Project, 2011). Organizations such as the Los Angeles Neighborhood Land Trust, the City Project, and Community Health Councils are undertaking efforts to decrease the open space deficit by identifying publicly-owned parcels and other opportunity sites that can be converted to parks. These efforts, however, are focused on the supply of open space, and do not strategically examine whether the opportunity sites fall within areas of great demand for parks. Additionally, these efforts do not focus on the park needs of older adults.

Older adults are a highly underserved group in regards to parks, despite the fact that scholars have found a "healing effect" and promotion of one's physical and emotional well-being when spending time in natural settings (Rodiek, 2002). Studies have also shown that physical activity, tailored to specific needs, can benefit even the oldest and most frail individuals (Pahor et al., 2006), and that a regular physical activity regimen may even slow their aging process (Sun et al., 2010). Despite the strong link between physical activity and health, older adults represent the most inactive portion of the population. This is due, in part, to a general lack of recreational and park facilities designed with older adults in mind. In the City of Los Angeles, even though older adults comprise about 10% of the population, there are no parks designed to address their particular needs.

The unmet open space needs of older adults in the City of Los Angeles can be attributed to three main reasons. First, the city ranks behind other major United States cities in park acreage per capita, and does not have parks specifically designed for seniors. Second, there is a general lack of knowledge about the open space needs of older adults, and how these needs may differ for different groups of seniors. Third, little is known about the influence of the built environment on the physical activity patterns of different groups of seniors. A neighborhood's built environment may include: walkable streets, availability and proximity of parks and recreational facilities, availability of exercise equipment, and pedestrian amenities, such as sidewalks or footpaths, pedestrian lighting, intersection crossing features, and foliage and pleasant landscape scenery.

This report seeks to build upon the work of the Los Angeles Neighborhood Land Trust, the City Project, and Community Health Councils to address park needs in Los Angeles, but also focus particular attention on the needs of older adults. The spatial analysis presented here complements our earlier report, *Placemaking for an Aging Population: Guidelines for Senior-Friendly Parks*. While the earlier report focused on the development

of urban design guidelines for senior-friendly parks, this report intends to identify the areas of high need but also high opportunity in the City of Los Angeles for developing senior-friendly parks.

The aforementioned report was a response to an ideal opportunity; a local organization, the Los Angeles Neighborhood Land Trust, identified an opportunity site for a park and purchased a vacant lot adjacent to a well-used senior services center. This spurred the UCLA researchers to investigate senior-focused park design recommendations, but also to try and pinpoint other appropriate locations for possible parks. In what follows, we detail our process of identifying recommended sites for senior-focused parks within the City of Los Angeles. We first discuss our methodological considerations by exploring approaches from previous studies examining open-space access. Following that, we discuss the development of a Senior Park Need Index (sPNI). This index indicates areas of highest need for senior-focused parks taking into account where seniors live, locations of senior services and current levels of park access. Applying the sPNI to the City of Los Angeles census tracts, we identify and profile city areas with the highest need for senior-focused parks, and further explore the particular sites available in these tracts for transformation into parks. Additionally, we examine the sites for future planned parks within the City that could incorporate senior-friendly design. In the final section, we offer recommendations on how the City of Los Angeles and other nonprofit groups should proceed to satisfy the need for more senior-friendly parks.

METHODOLOGICAL APPROACH

METHODOLOGICAL APPROACH

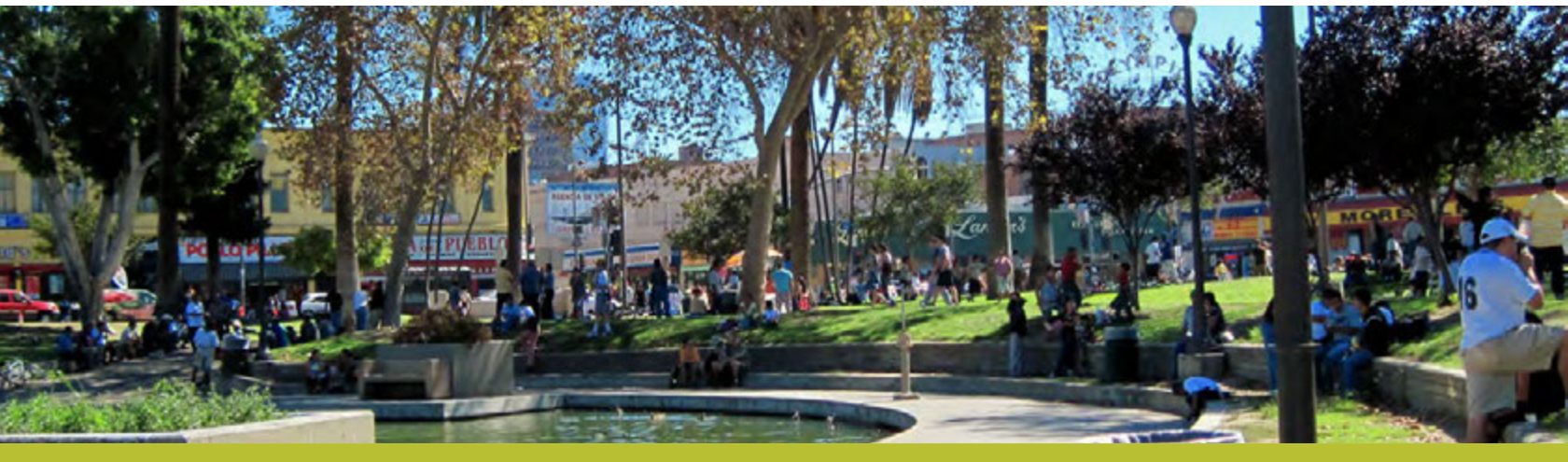
Previous Approaches to Measuring Park Access

Older adults are a highly underserved group in regards to parks (Rodiek, 2002). In this study, we use spatial analysis (Geographic Information Systems or GIS) to examine the current levels of seniors' access to open space in the City of Los Angeles, identify their unmet needs, and develop intervention strategies.

Different approaches can be used to conduct this type of analysis; with each approach influencing the final results. Before deciding on a particular approach for this study, we examined the general methodological considerations of previous studies undertaking similar analyses. More specifically, we examined the relative merits of three approaches: (1) container model, (2) travel cost model and (3) gravity model. Put simply, the container model measures the amount of parks in a designated area. The travel cost model considers the distance from an area to the nearest park. The gravity model is the most complex, as it requires information about park quality and individual preferences in accessing a park. This approach may be more sophisticated but is difficult to employ because very few municipalities likely have such information available on a citywide scale. The section below gives some more information about the three approaches and their considerations.

Container Model

The container model is well established in open space studies (Boone et al., 2009; Heynen et al., 2006; Wendel et al., 2011). Under this method, a series of indicators, such as the total amount of park space, park space per capita, or the number of parks, are calculated within a given geographic area. The exact size of the geographic area can vary; it can be a neighborhood, a census block group, a census tract or a ZIP code. Socio-economic and demographic characteristics of the geographic area can then be compared to measure the relationship between park access and equity.



Though frequently used, the container method has several drawbacks. Container-based measures are subject to a greater error in estimating park access per capita if a large-scale geographic unit, such as a city, is selected than if a smaller geographic unit, such as a neighborhood, census tract or census block is selected (Fotheringham & Wong, 1991).The second drawback is that this method assumes that everyone in the geographic unit is equally distributed and has equal access to parks. However, the population may be skewed towards one portion of a neighborhood, while the parks may be located on the opposite side. Given these drawbacks, researchers must be careful about selecting the appropriate geographic unit of analysis, when using this approach.

Travel Cost Model

In contrast to the container model, the travel cost model analyzes distance to the nearest park rather than calculating the total size of parks within a geographic area. Cost refers to the amount of time one expends when traveling to the park; therefore, in this case cost is equivalent to distance. Typically, performing this calculation requires measuring the distance from the center of a park to the specified unit of geographic analysis. This distance measurement can be simple, using a straight line from a point to a park center (Wolch et al., 2005), or more complex, measuring the distance along the street network (Comber et al., 2008). This approach improves upon the container method because it does a better job of capturing the access for people living in areas with large parks in the general vicinity, but which are not directly adjacent to their area of residence. A large park may make an area appear to have a high level of park access, while in reality the travel distance (or cost) to the park is quite large.

Despite this advantage, the travel cost approach has its own drawbacks. This approach always calculates the distance from people to the nearest park, using distance as the measure of access. However, it assumes that people will always visit the park closest to their residences while in reality, personal preferences, park amenities, and travel modes could lead people to prefer parks that are not the ones closest to their homes. For example, Kaczynski et al. (2008) found that park features were more preferred over park size and distance from home. Overall, the travel cost method provides an important advantage to the container model approach, but also a somewhat incomplete picture of park access.

Gravity Model

This approach is the most complex but does the best job of assessing the interactions between park size, distance and amenities. When using a gravity model approach, the appeal of each park is assessed by interactions between park attractiveness and distance. For example, a park that is a moderate distance away but has attractive amenities would rank higher than the closest park with poor amenities. This

approach is used in studies examining the interaction of accessibility and preference including the study by Handy & Niemeier (1997) assessing neighborhood accessibility, and the study by Giles-Corti and Donovan (2002) examining the influence of the physical environment on physical activity. Notably, this approach is absent from most open space accessibility studies because it requires a complex understanding of how individual preferences vary. But the largest drawbacks to this approach relate to data availability and the reliability of expanding individual preferences to a city-wide scale.

Selected Approach

Our selected methodological approach is described in detail below. In relationship to the approaches previously described, we used the travel cost approach as an exclusion criterion, eliminating areas that had a park within a half mile. For the remaining sites, we then used the container approach to assemble the other variables of interest; namely the percentage of people over the age of 65, number of senior housing facilities, senior-service facilities, and the median income per tract. We were unable to employ the gravity model because we did not have the detailed data required for this model.

The selected unit of analysis for this study is the census tract. We identified census tracts that currently lack any parks within a half-mile walk (see Figure 1) and labeled them as "park need census tracks". According to the Center for City Park Excellence and the Trust for Public Land, a half-mile walk is a common national standard for measuring park access (Harnik and Martin, 2014). The identified tracts did not meet this standard and largely had no park within the census tract[1], eliminating the need for analyzing park access through the aforementioned container approach. For these census tracts, we then calculated the senior park need index as detailed in the following section.

Geographic Unit Selection

Spatial and statistical analyses require careful consideration of the geographic unit of analysis. One goal of the study is to evaluate seniors' open space needs by neighborhood. We, therefore, selected as the geographic unit of analysis the census tract. The reason is that each census tract contains a fairly similar size of population, averaging approximately 4,000 people per tract. The exact area of census tracts varies; tracts in dense urban areas of Los Angeles are smaller than those in more suburban areas. Additionally, we decided to use census tracts for consistency purposes. While demographic information is available for smaller geographic units, such as census block groups, the criterion of having parks within a half-mile distance can be better observed at the census tract level. For these reasons, the census tract is the unit of analysis.

1 We also included census tracts that may have had a park within a half mile, if a freeway separated them from the park, because we considered a freeway as a major barrier to walking access.

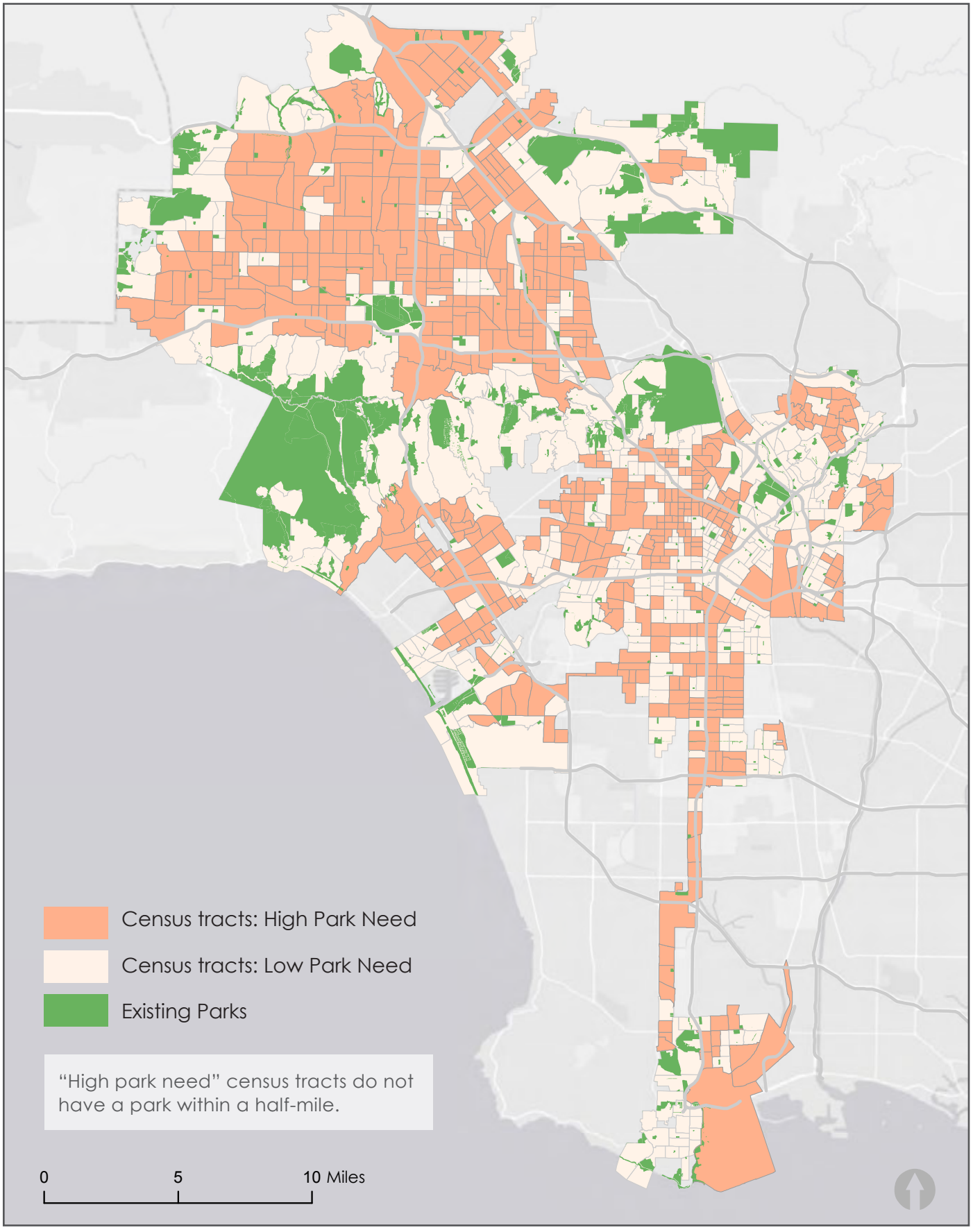
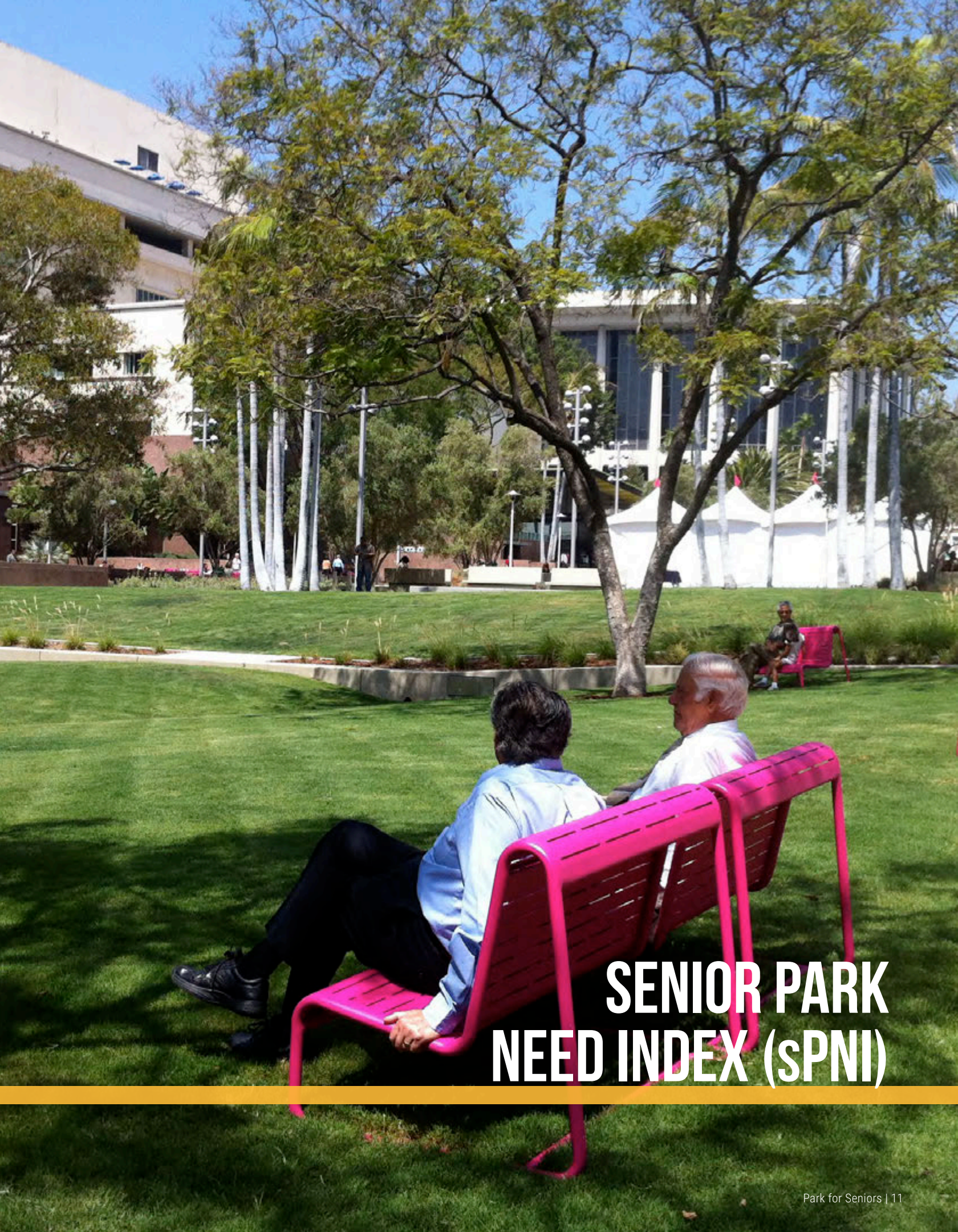


Figure 1: *Park need census tracts*



SENIOR PARK NEED INDEX (sPNI)

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We created a **senior park need index (sPNI)** by using the following variables, all measured at the census tract level:

1. **Percentage of people over 65 years old**
2. **Number of senior-affordable housing units**
3. **Number of senior-focused facilities**
4. **Median household income**

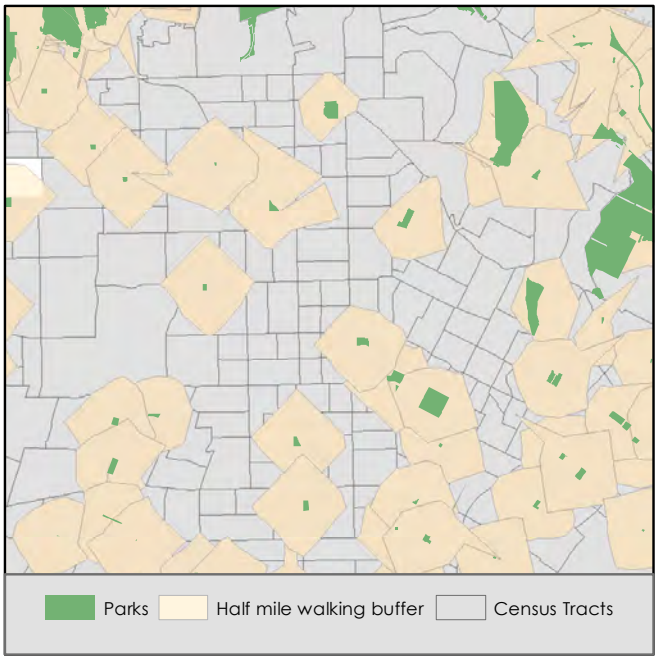


Figure 2: *Park walking shed analysis*

We measured these factors for park need tracts, previously established as tracts that do not have a park within a half-mile. We identified these tracks as follows: Starting at the center of each park, we used the street network to create a half-mile walking shed. For each census tract, we calculated what percentage of the tract was covered by the park walking shed. Census tracts considered as having good access to parks (and therefore not included in our analysis) are those for which more than 50% of the tract is covered by the park walking shed (see Figure 2). In contrast, Park Need Census Tracks are those for which more than half of their area does not have a park within a half-mile. We used this percentage threshold to avoid having a census tract that is barely covered by a park walking shed deemed as having good park access.

Percentage of Older Adults

The first variable considered for the sPNI calculation is the percentage of people over 65 in each census tract. This data comes from the American Community Survey 5-year (2009 – 2013) dataset. In the City of Los Angeles, 10.7% of people are over 65. By census tract, this figure ranges between 0% and 47% (see Figure 3). Overall, the western parts of Los Angeles have a higher percentage of older adults compared to the eastern parts of the City; both in the San Fernando Valley and in the Los Angeles Basin. It should be noted that the eastern portions of the city have a higher percentage of minority households, which have a lower average age.

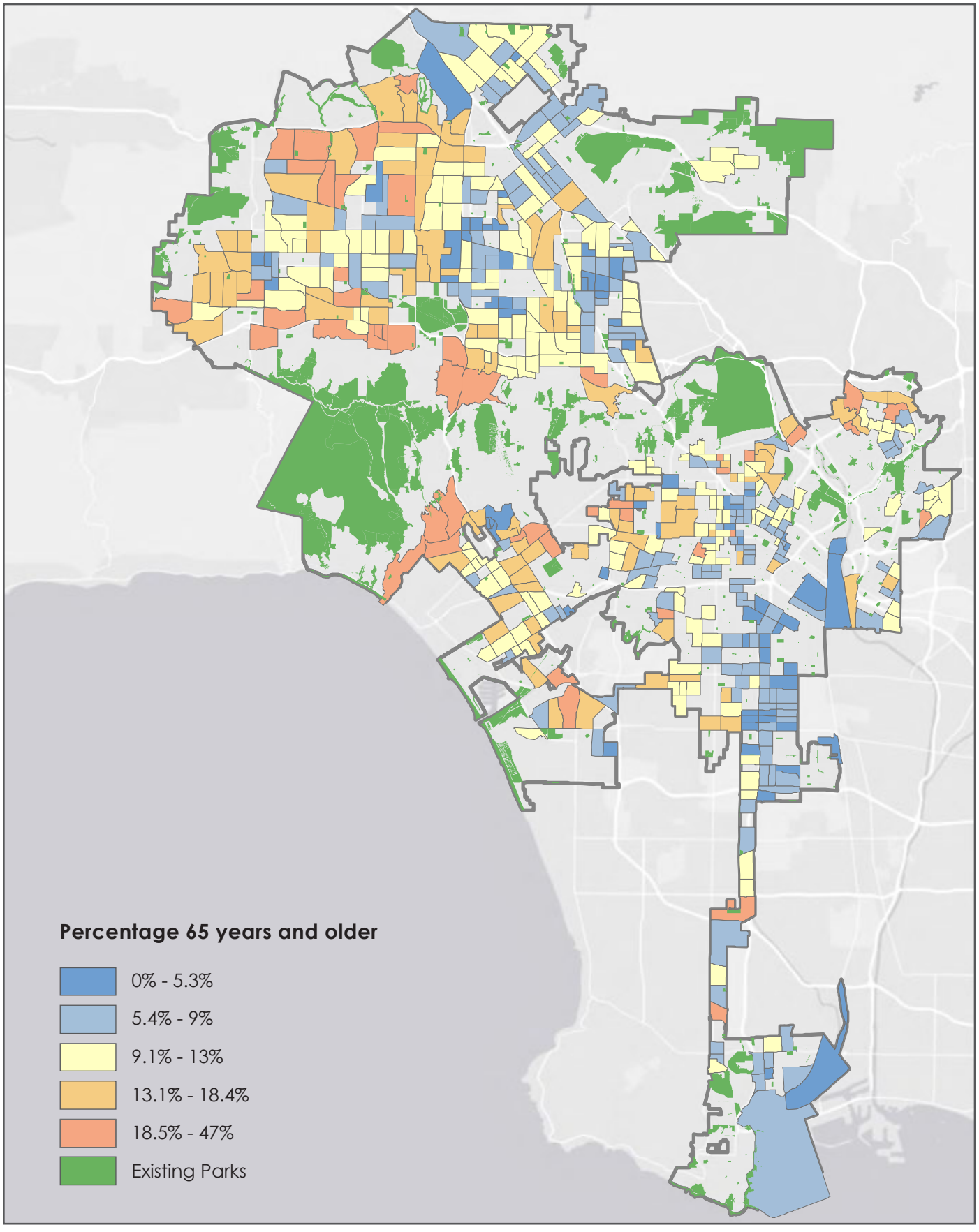


Figure 3: *Percentage 65 years or older*

Senior-Affordable Housing

We considered the number of units in senior-affordable housing complexes within each census tract as the second variable of interest. Information on the location and number of units of senior-affordable housing was retrieved from three sources: the US Department of Housing and Urban Development, the Los Angeles County Housing Resources Center, and the Los Angeles Housing + Community Investment Department. We removed any duplicate entries that were the result of listings on multiple sites. Thus, we identified 115 senior-affordable housing developments with a total of 10,368 affordable units located in the City of Los Angeles. As seen in Figures 4 and 5, these units are spatially clustered in close proximity to Downtown Los Angeles.

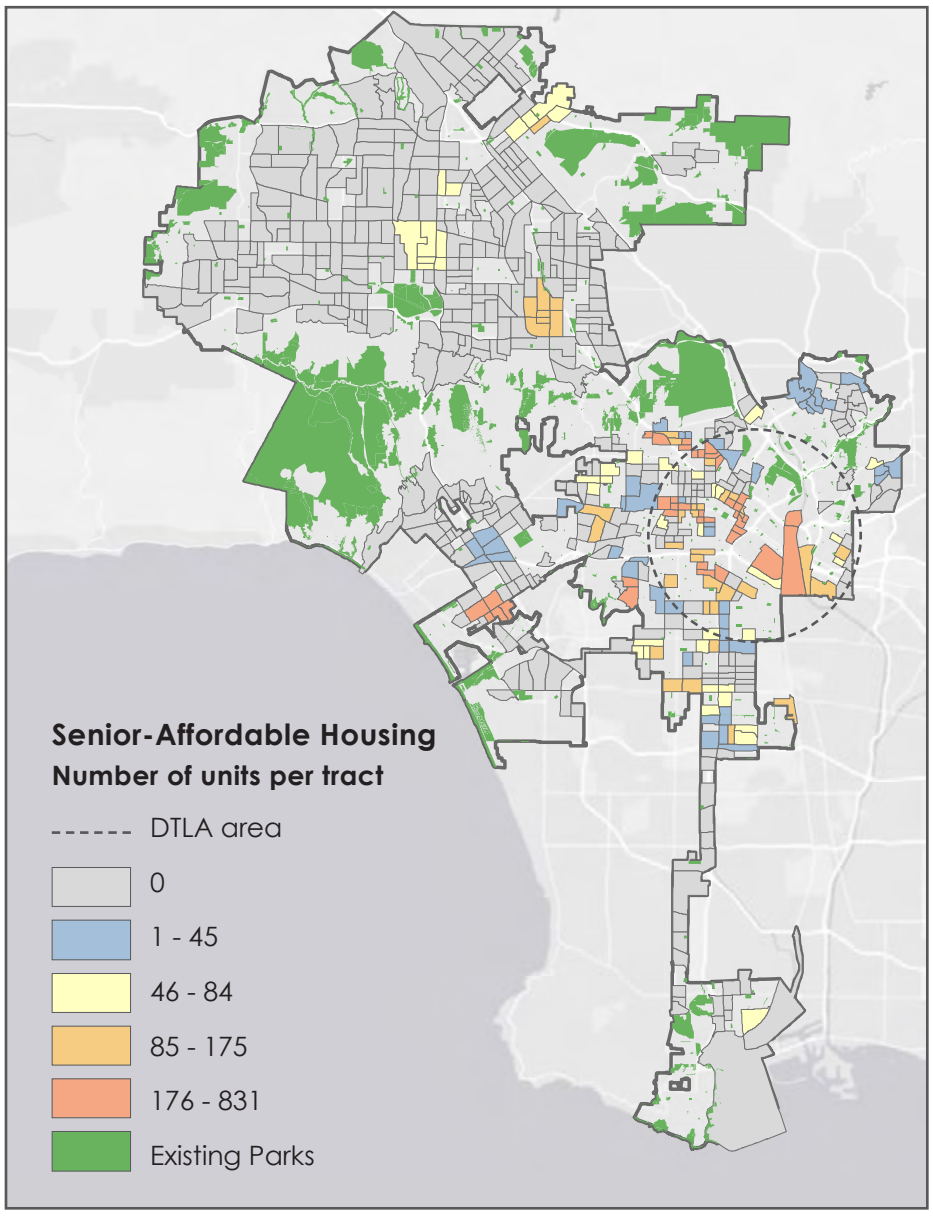


Figure 4: *Senior-affordable housing locations*

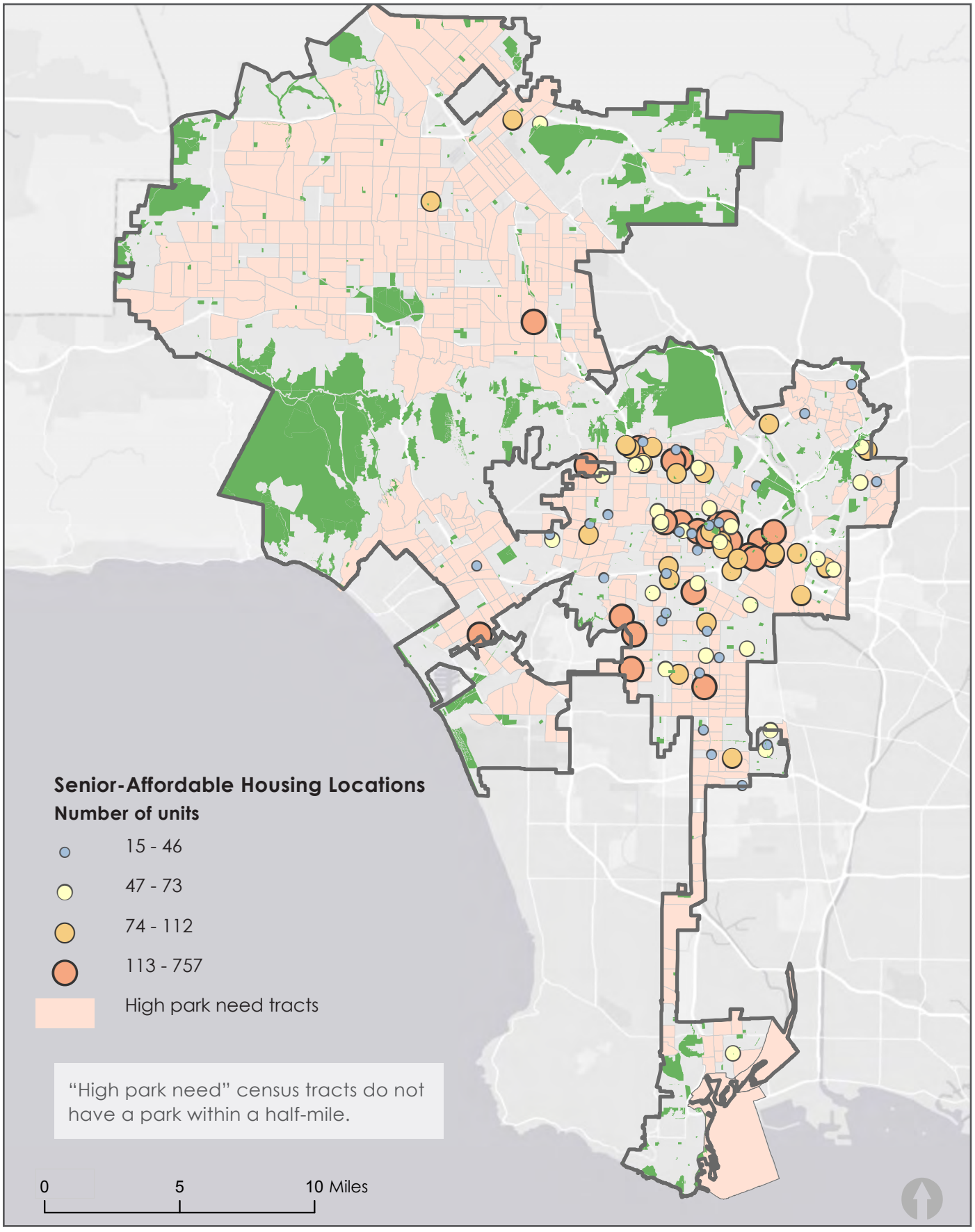


Figure 5: Affordable units by tract

Senior Service Facilities

Next, we measured the number of senior oriented facilities by census tract. We considered four types of facilities: skilled nursing facilities, residential care facilities for seniors, adult day care centers and senior service centers. The data on senior service facilities was retrieved from three sources: (1) California Department of Public Health, (2) California Department of Social Services, and (3) City of Los Angeles Department of Recreation and Parks. Table 1 shows the number of each type of facility in Los Angeles. As seen in Figure 6, these facilities are most often located in central Los Angeles, near West Hollywood, Hollywood and south of Beverly Hills.

Facility Type	Number of facilities
Skilled nursing	78
Residential care	167
Adult daycare	29
Senior service center	32
Total	***306***

Table 1: *Senior service facility distribution*

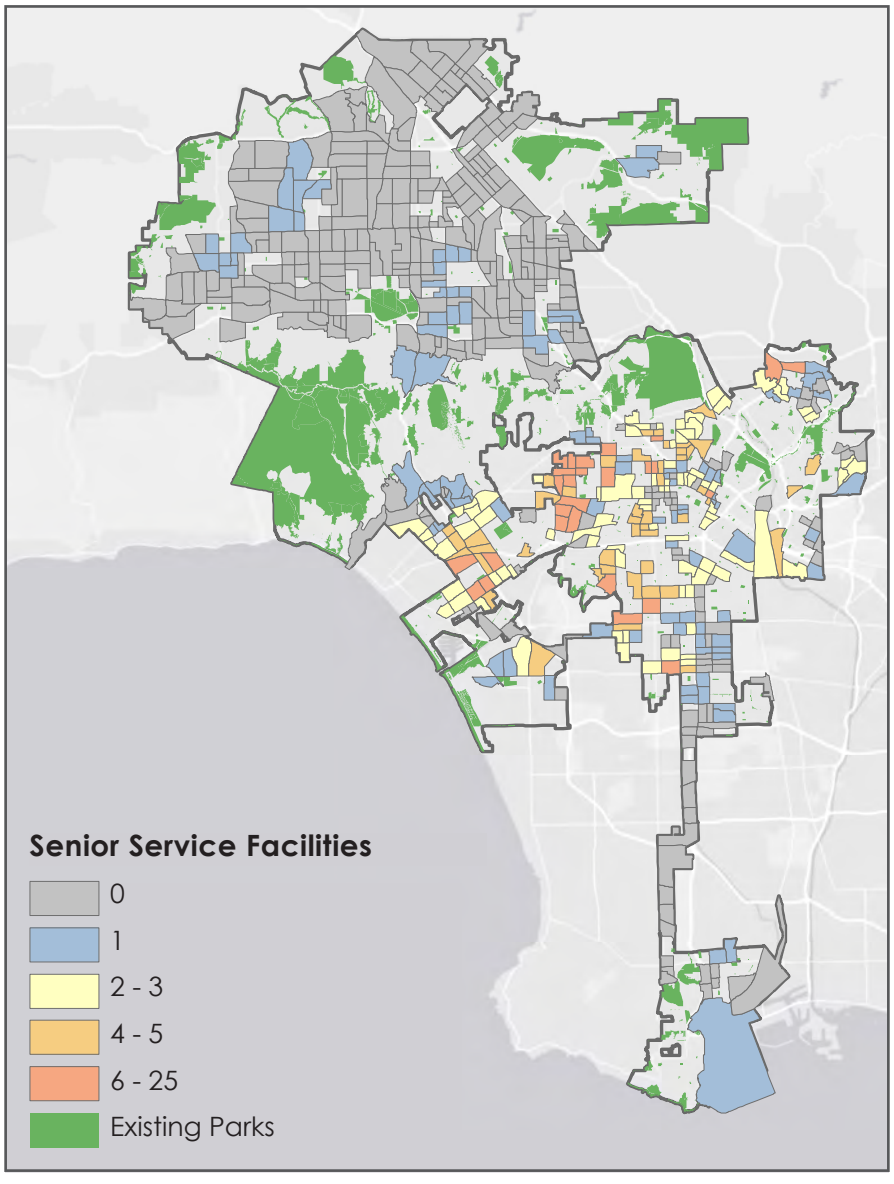


Figure 6: *Senior service facilites*

Median Household Income

We also considered median household income for the calculation of the sPNI to capture areas with concentrations of low-income households. This variable was included to help prioritize lower-income areas for the provision of parks. Income data comes from the American Community Survey 5-year estimate (2009-2013) dataset. As can be seen in Figure 7, areas with low median household income are clustered in Downtown Los Angeles, Central Los Angeles, South Los Angeles and to a lesser degree, in the central San Fernando Valley.

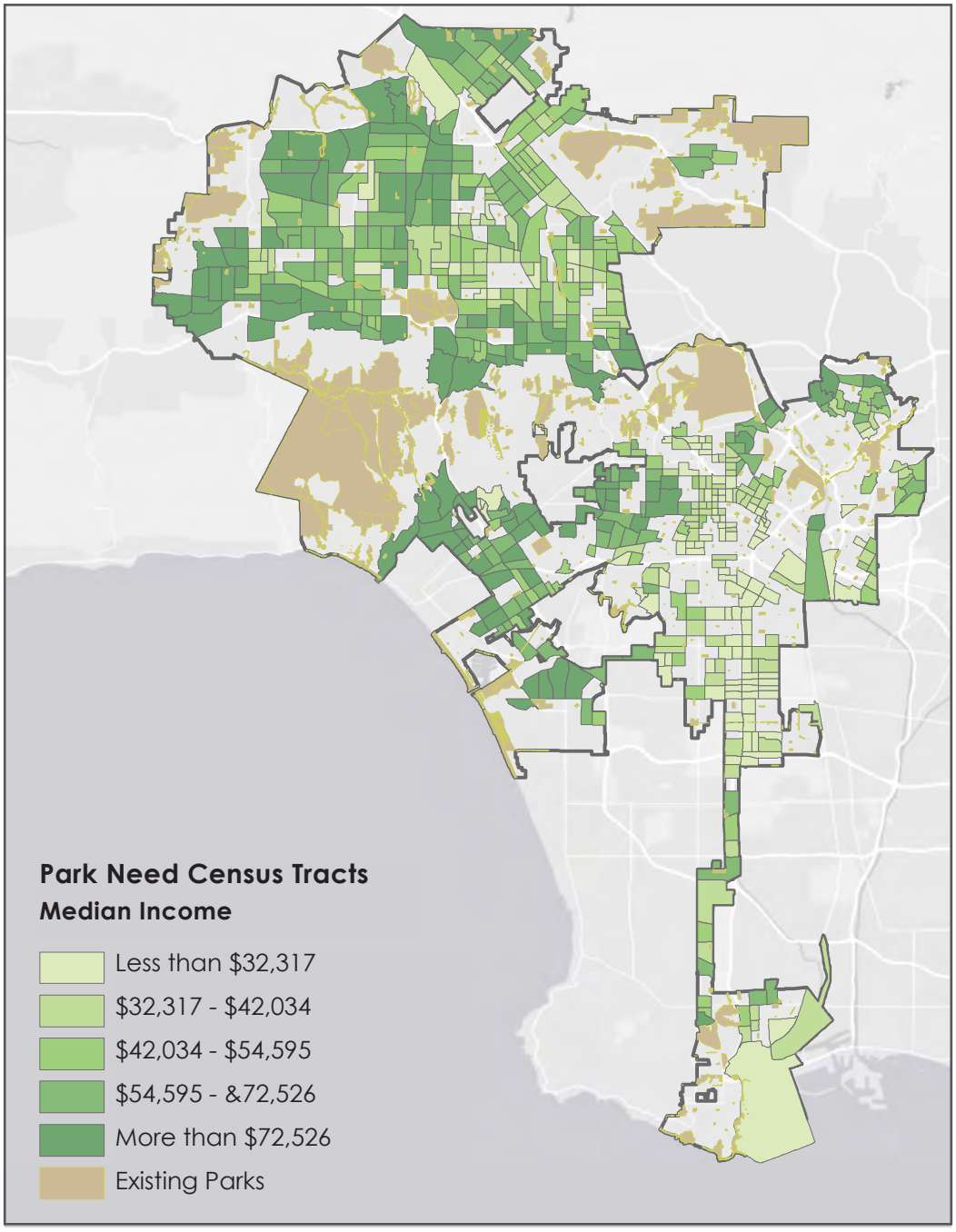


Figure 7: *Medium income by tract*

Variable combination

After calculating the variables individually for each park need census tract in the City of Los Angeles, we combined the values to calculate an overall senior park need index (sPNI) for each track.

Senior Park Need Index (sPNI) = percentage of population over age 65 + number of senior-affordable units + number of senior service facilities + median tract income

Population Over 65 (%)	Age Points	Senior Housing Units (#)	Senior Housing Units Points	Number of Senior Facilities	Facility Points	Income ($)	Income Points
0 - 5.3	0	0	0	0	0	< 32,317	4
5.4 - 9	1	1 - 45	1	1	1	32318 - 42034	3
9.1 - 13	2	46 - 84	2	2 - 3	2	43034.01 - 54595	2
13.1 - 18.4	3	85 - 175	3	4 - 5	3	54595.01 - 72526	1
18.5 - 47	4	176 - 831	4	6 - 25	4	> 72526.01	0

Table 2: *Variables in senior park need index*

Each variable received an equal weight in the overall calculation. As seen in Figure 8, the final scores ranked from 1-16; with the highest need tracks scoring between 10-16.

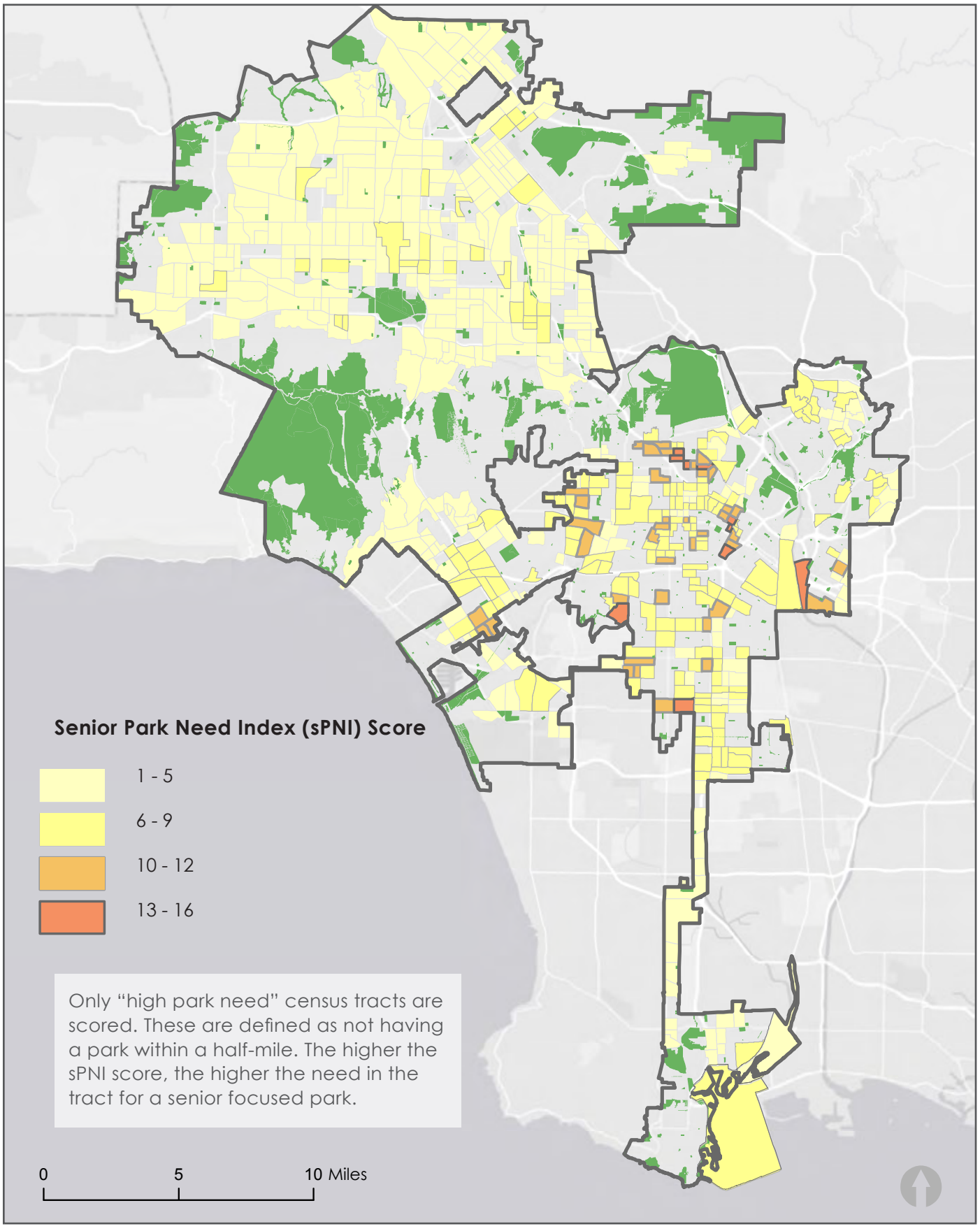


Figure 8: Senior park need index score by tract

Following our ranking of the senior park need census tracts using the sPNI, we concentrated on the census tracts which scored in the top groups (having a sPNI score from 10-16). We geographically categorized these tracts by Community Plan Areas. Unlike neighborhood boundaries, which may be subjective, Community Plan Area boundaries are recognized by the City of Los Angeles Planning Department. We found that census tracts having a sPNI of 10 or higher are located within eight Community Plan Areas. The Hollywood and Wilshire Community Plan Areas have the most census tracts without park access and a sPNI equal to 10 or greater. The distribution of census tracts with a high sPNI across the eight different Community Plan Areas is shown in Table 3 and Figure 9 below. In the following section we give a brief description of these eight Community Plan Areas.

	Tracts without park access	Tracts with sPNI ≥ 10	% of total
Boyle Heights	9	3	33%
Hollywood	30	12	40%
Palms	18	3	17%
Southeast LA	31	1	3%
South LA	31	6	19%
West Adams	19	5	26%
Westlake	13	8	62%
Wilshire	56	10	18%

Table 3: *Number of tracts with need by Community Plan Area*

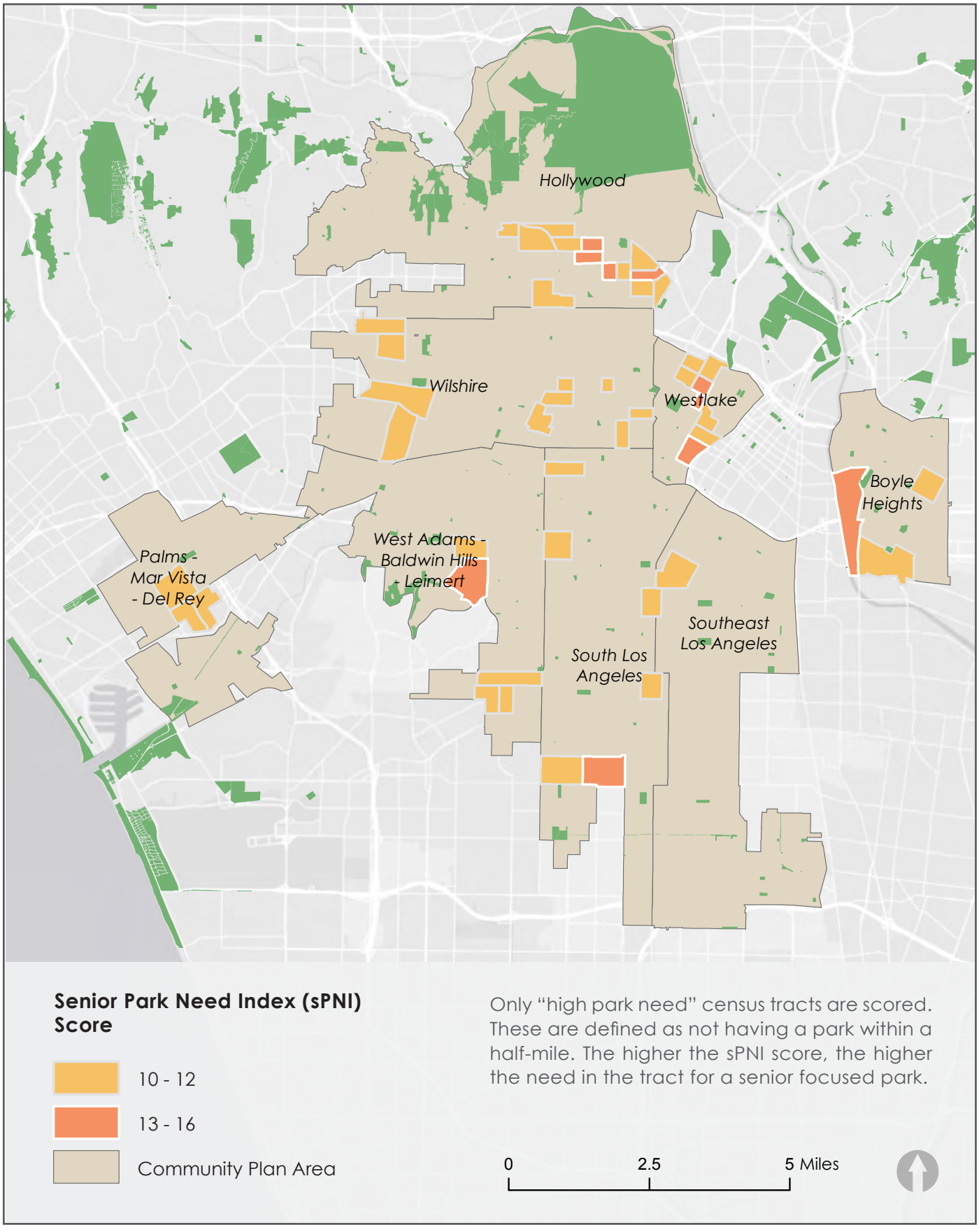


Figure 9: Tracts with great need by Community Plan Area

NEED AREA PROFILES

Boyle Heights

Boyle Heights is a predominately Hispanic area located to the East of Downtown Los Angeles that has an average median income of less than $35,000 per year. There are nine small neighborhood parks for the 83,336 people living in this low-income area. These neighborhood parks are spread throughout the Community Plan Area, but 40% of the tracts do not have a park within a half-mile distance. Of these nine park need tracts, three have a sPNI of 10 or higher. These high sPNI tracts have 383 senior-affordable housing units and eight senior-service facilities.

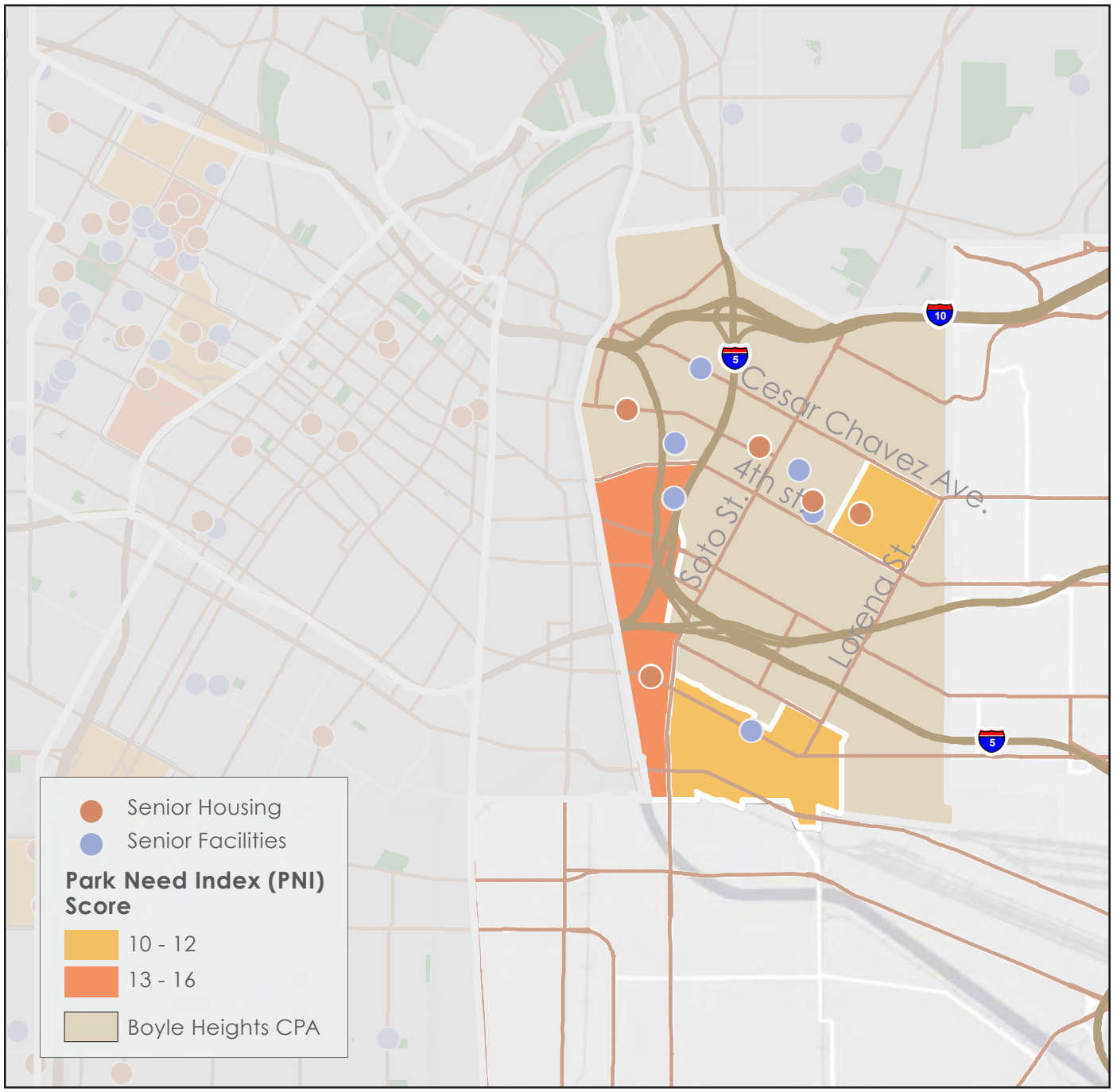


Figure 10: Boyle Heights demand

Hollywood

The Hollywood Community Plan Area is quite large containing both dense multi-family mixed use areas and hillside single-family residences. The median income in the Hollywood Community Plan Area is $52,797. Griffith Park, a large regional park; Runyon Canyon, a major hiking attraction; and Barnsdall Park, that includes the Frank Lloyd Wright Hollyhock house, all fall within the Hollywood Community Plan Area. But beyond these three attractions, there are only six neighborhood parks for the 202,357 people living in this area. About 50% of residents cannot walk to a park within a half-mile distance of their home. We found 12 census tracts that had a sPNI of 10 or higher. The median income in these tracts is meaningfully lower, at $29,966, than the CPA as a whole. Furthermore, within these tracts, 12% of the people are over the age of 65; there are a lot of senior-affordable units near the 101 freeway and a great number of senior facilities for these tracts near the western border of the area with West Hollywood.

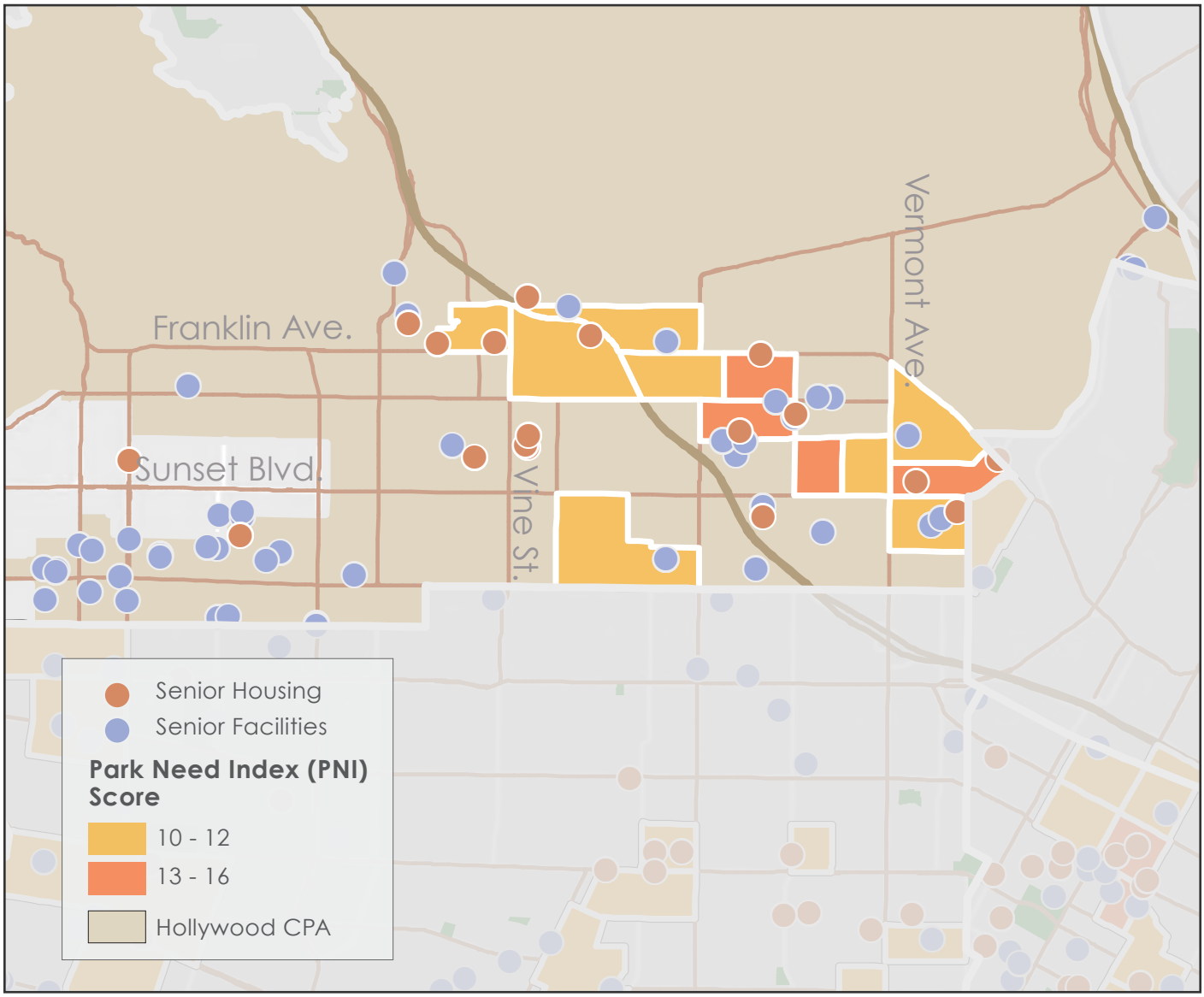


Figure 11: Hollywood demand

Palms - Mar Vista - Del Ray

This Community Plan Area is on the Westside of the City of Los Angeles, between the City of Santa Monica, Culver City and extends for a few miles east of the 405 freeway. This is the most affluent of the high-need Community Plan Areas; the median income is $65,642 for the 117,988 people living in this area. There are five small parks available but more than half of the census tracts do not have a park within a half-mile. We found three adjacent census tracts with a sPNI of 10 or higher. Thus, a senior-focused park in any of these three tracts could be beneficial to many seniors living in the adjacent areas. There are a lot of senior-affordable housing units and over 17 senior-oriented facilities in these three high need census tracts.

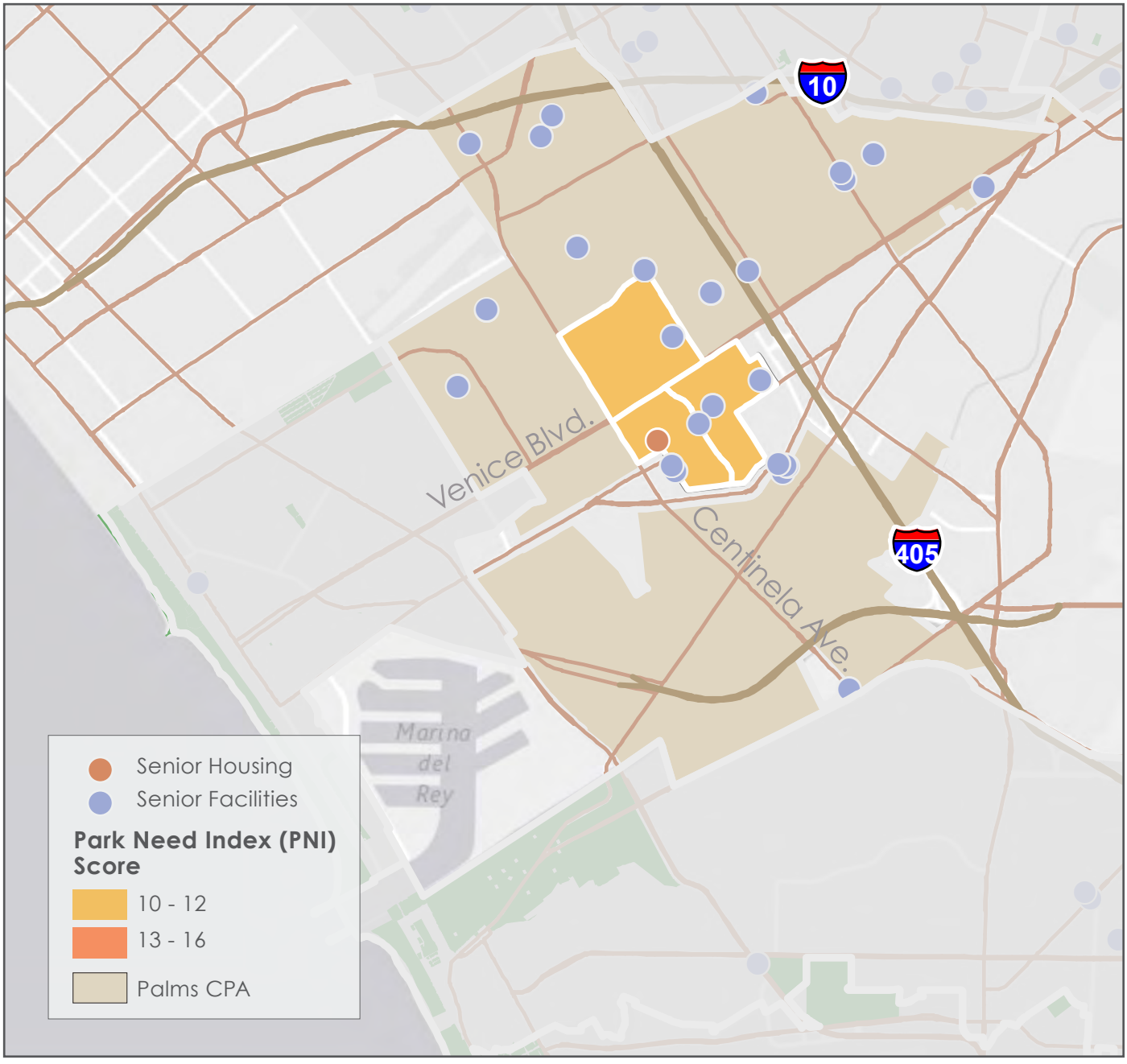


Figure 12: Palms-Mar Vista-Del Ray demand

Southeast Los Angeles

This Community Plan Area is located to the East of the 110 freeway and the University of Southern California (USC), and to the south of Downtown Los Angeles. The Southeast Los Angeles CPA is the eastern border of the City of Los Angeles, bordered by the cities of Huntington Park, Vernon and South Gate. There are 276,150 people living in the area with an average median income of $29,616. This CPA has a lower percentage (5.5%) of residents over the age of 65. There is only one census tract that had a sPNI of 10 or higher; just to the East of USC, with a high concentration of senior-affordable units. While we cannot say confidently how the older adults are distributed across this tract, we suspect that almost all of the 207 people over the age of 65 live in the concentration of senior-affordable housing units.

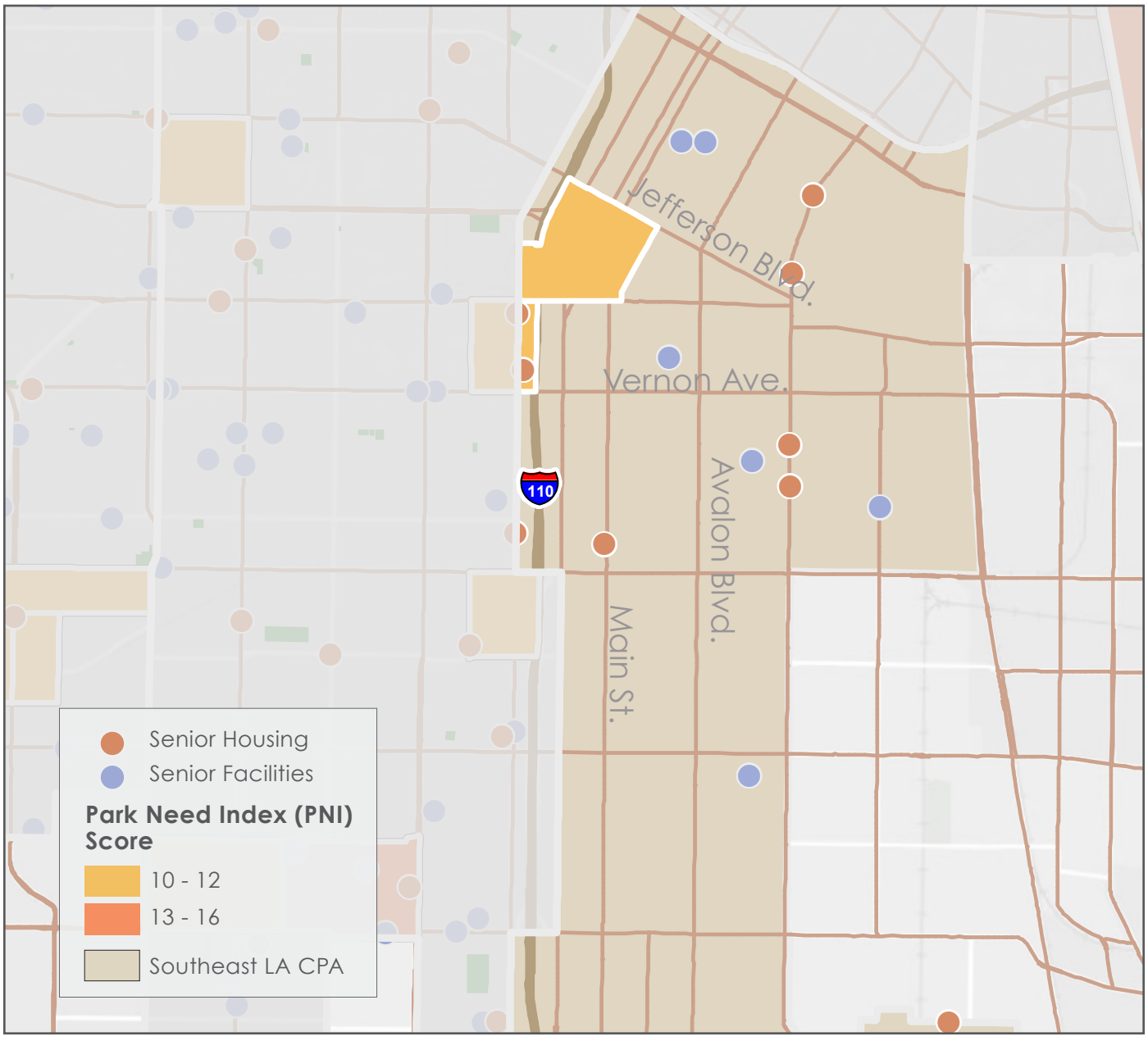


Figure 13: Southeast Los Angeles demand

South Los Angeles

This Community Plan Area stretches slightly north of the I-10 freeway to the southern border of the City of Los Angeles at the 105 freeway, from Crenshaw Blvd to the west to about the 110 freeway to the east. The South Los Angeles CPA is similar to the Southeast Los Angeles area; a low-income ($29,687 average median income), dense area with 273,260 residents. Approximately half of the census tracts do not have a park within a half-mile, and six tracts have a sPNI of 10 or higher. These high need tracts have over 600 senior-affordable housing units and 23 senior-oriented facilities.

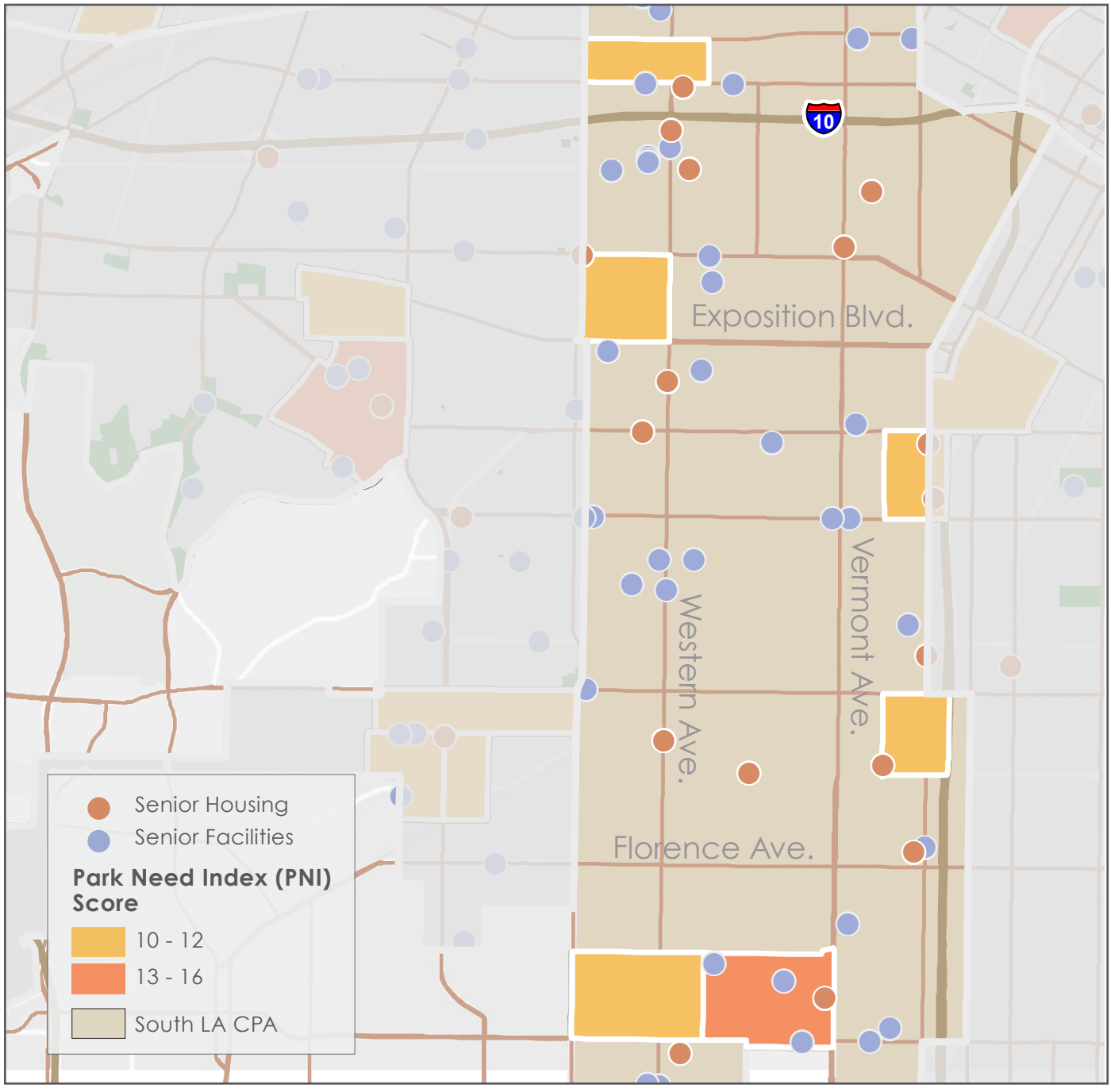


Figure 14: South Los Angeles demand

West Adams - Baldwin Hills - Leimert Park

This Community Plan Area, slightly north of the 10 freeway, stretches to the City of Los Angeles border with Culver City to the west, Western Avenue to the East, and City of Inglewood to the south. The 173,287 residents in this CPA have a slightly higher median income, $40,300, compared to the nearby South and Southeast Community Plan Areas. The area has some neighborhood parks and the large regional park, Kenneth Hahn Recreation Area, but 40 percent of its census tracts do not have a park within a half-mile. Five census tracts have a sPNI of 10 or higher. All these tracts have an above city average percent of residents over 65 (14.3%), due in part to the 600 senior-affordable housing units located there.

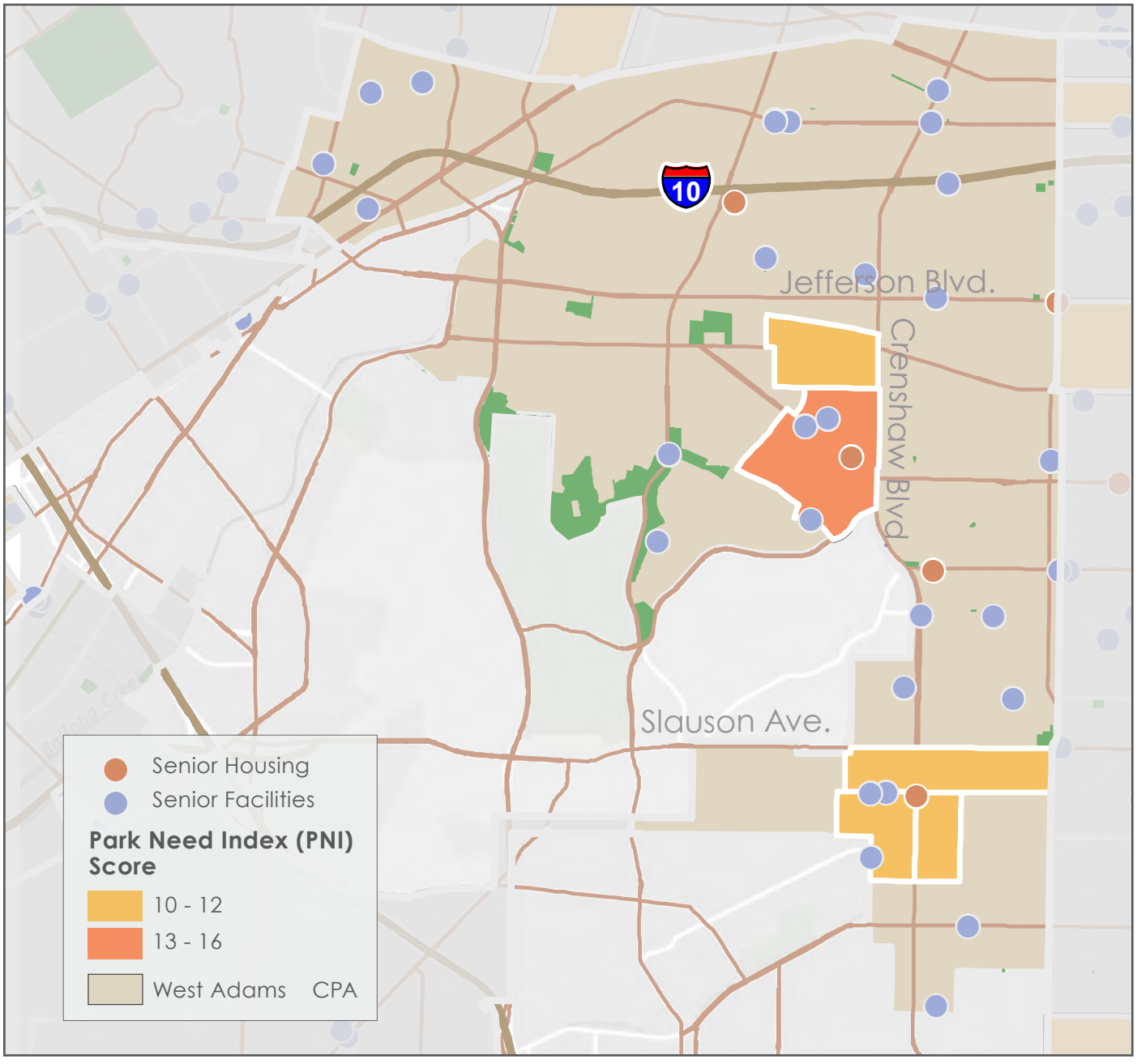


Figure 15: West Adams-Baldwin Hills-Leimert Park demand

Westlake

Approximately 112,000 people live in this three square-mile area, making Westlake the densest Community Plan Area in the City of Los Angeles. The area stretches from the 101 freeway to the North, Olympic Blvd to the South, and the 110 freeway and Downtown Los Angeles to the East. The area is home to MacArthur Park but has only two other neighborhood parks for its mostly low-income residents, whose average median income is $27,385. There are nearly 4,000 senior-affordable housing units and 33 senior-oriented facilities in this area. There are eight census tracts with a sPNI of 10 or higher in the Westlake Community Plan Area, and within these eight tracts, 8.9% or 2,700 people are over the age of 65.

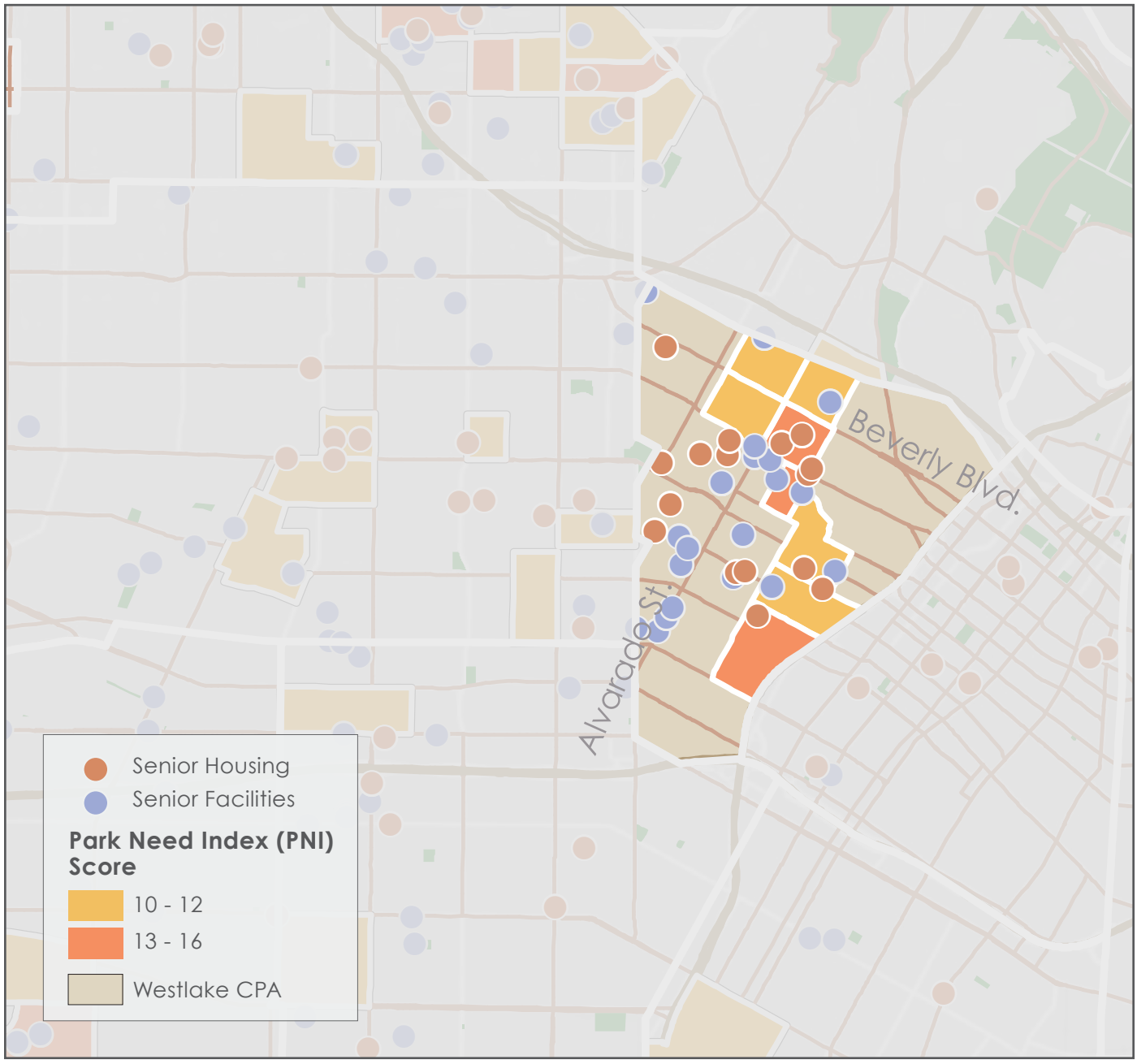


Figure 16: Westlake demand

Wilshire

The Wilshire Community Plan Area covers the central portion of Los Angeles, including many diverse and distinct neighborhoods. The area stretches from the 101 freeway to slightly south of I-10 freeway, and from approximately Crescent Heights Blvd. to Vermont Ave. The median income is $49,500 for the 288,355 residents in the area. This Community Plan Area includes predominantly Jewish neighborhoods near Fairfax and other ethnic enclaves in Koreatown, Byzantine-Latino Quarter and Pico-Union. Nearly 70% of the census tracts in the Wilshire CPA do not have a park within a half-mile, while 10 census tracts have a sPNI of 10 or higher. There are over 1,000 senior-affordable units in these tracts and nearly 50 senior-oriented facilities. Because of the area's multi-generational households, senior-affordable housing units and senior-oriented facilities, the demand for senior-oriented parks is very high here.

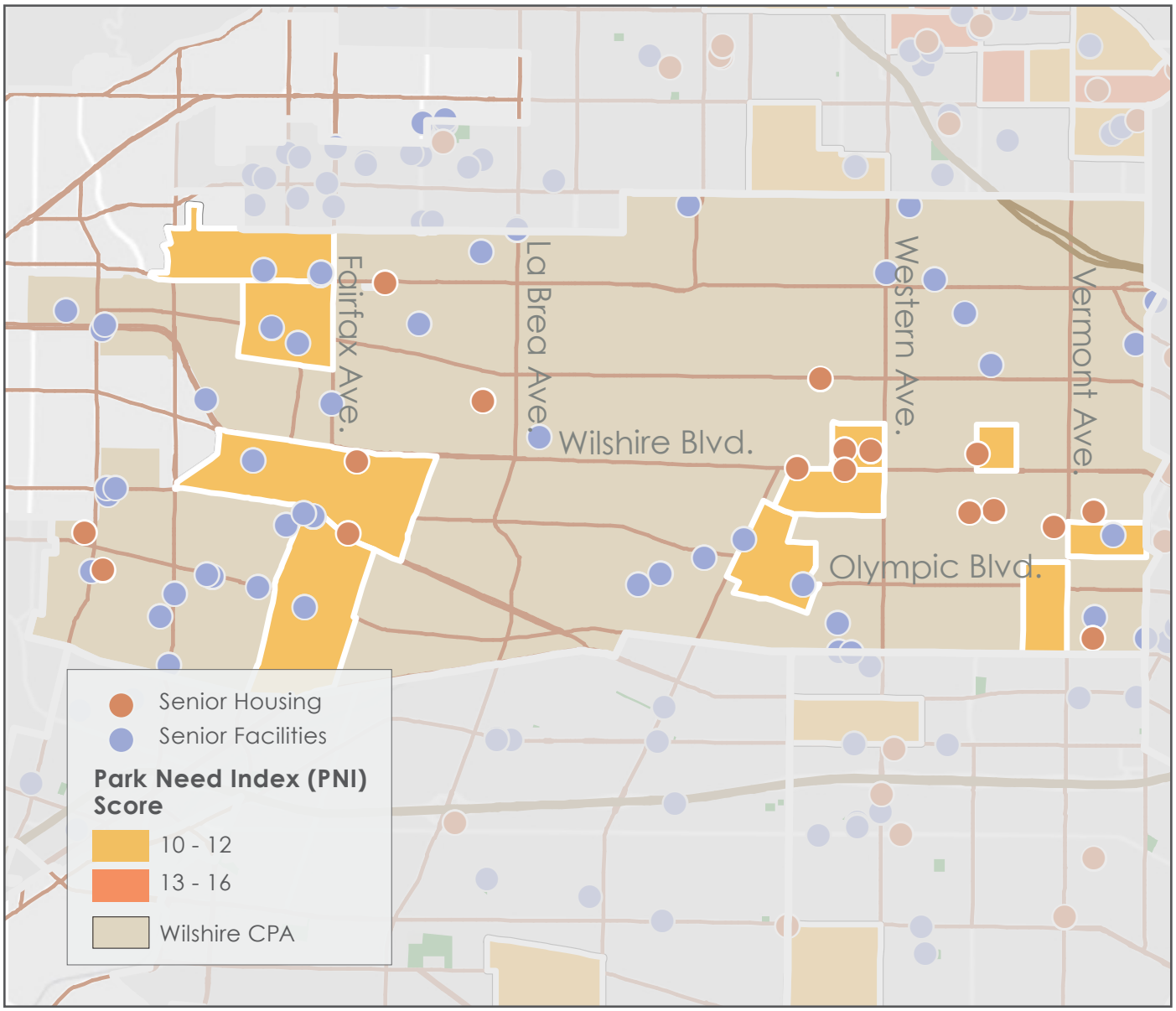


Figure 17: Wilshire demand

Tables 4 and 5 summarize the previous discussion:

	Community Plan Area-wide statistics					
	% of tracts without park within half mile	# people	% people 65 or older	Median income	Senior-affordable housing units	Senior-oriented facilities
Boyle Heights	39%	83,636	8.8	$33,929	567	14
Hollywood	49%	202,357	11.4	$52,797	2,805	110
Palms	60%	117,988	10.8	$65,642	380	46
SE LA	48%	276,150	5.26	$29,616	700	18
South LA	46%	273,260	8.8	$29,687	1,716	78
West Adams	41%	173,287	11.7	$40,276	856	62
Westlake	41%	112,001	8.5	$27,822	2,274	38
Wilshire	69%	288,355	10.4	$49,562	1,750	92

Table 4: *Community Plan Area demographics*

	Tracts with sPNI scores ≥ 10					
	# of tracts	# people	% people 65 or older	Median income	Senior-affordable housing units	Senior facilities
Boyle Heights	3	9,350	13.2	$27,612	383	8
Hollywood	12	39,586	12	$29,966	3,196	46
Palms	3	11,484	11.5	$64,722	190	17
SE LA	1	2,894	7.5	$25,197	115	2
South LA	6	27,434	11.2	$32,910	637	23
West Adams	5	17,816	14.3	$36,001	622	20
West Lake	8	31,322	8.9	$26,360	3,490	28
Wilshire	10	31,629	16.5	$48,190	1,370	48

Table 5: *High need CPA descriptive statistics*

VACANT LOTS ANALYSIS

VACANT LOTS ANALYSIS

We now turn our attention to identifying possible opportunity sites for establishing parks in the tracts with the highest need for senior-focused parks and open spaces. We considered as opportunity sites vacant lots within the City of Los Angeles located in the highest-need tracts (with sPNI of 10 or higher). Our primary data for vacant lots come from *LA Open Acres*, a project of the Community Health Councils that aims to identify and map vacant spaces in Los Angeles. According to this interactive mapping website (www.LAOpenAcres.org), there are approximately 700 publicly-owned vacant lots and 16,500 privately-held vacant lots within the City of Los Angeles. These lots are included on the website if they are coded as vacant and have an improvement value of zero from the Los Angeles County Tax Assessor's Property Database.

We only analyzed the sites from LA Open Acres that were located within the high-need census tracts. Because of health risk concerns primarily from air pollution, we eliminated from consideration vacant lots that are located within 500ft of a major freeway/highway. We further refined the criteria by selecting sites that are a quarter acre (.25) or larger. The City of Los Angeles classifies open space into 4 categories by size as seen below in Table 6. While a mini-park, in theory, could be as small as .01 acres, we used a quarter acre

threshold because the amount of time and effort put into the development of a very small park could be disproportionate to its size and benefit to the community. The quarter-acre threshold is arguably arbitrary, but does provide a good general guideline.

Park Category	Park Size
Mini Park	≤1 acre
Neighborhood Park	1-10 acres
Community Park	10 - 50 acres
Regional and Large Urban Park	≥ 50 acres

Table 6: *Park size categories (Source: City of Los Angeles, 2009)*

Within the high-need census tracts, there are 58 vacant lots; 14 publicly owned and 44 privately owned. The publicly available sites are slightly larger on average compared to the privately-held sites. This information is summarized below in Table 7. The vast majority of both public and private vacant lots fall within the mini-park category, with a handful of opportunities for neighborhood parks (1-10 acres).

	All vacant lots	Publicly held	Privately owned
Total Opportunity Sites	58	14	44
Total acres	56	13	44
Average size (acres)	0.82	0.9	0.8
Mini-park		10	37
Neighborhood park		4	7

Table 7: *Vacant lot by ownership in high-need census tracts*

Opportunity Sites in the Community Plan Areas

These sites are dispersed geographically amongst the high-need Community Plan Areas as shown in Table 8.

CPA	Total Park Opportunity Sites	Public	Private
Boyle Heights	24	11	13
Hollywood	6	1	5
Palms	2	0	2
Southeast LA	1	0	1
South LA	4	0	4
West Adams	11	1	10
Westlake	5	1	4
Wilshire	5	0	5

Table 8: *Geographic distribution of available vacant lots*

Boyle Heights

Of all the Community Plan Areas, Boyle Heights has the most park opportunity sites available. We found 24 total opportunity sites, with 11 publicly owned lots within the three highest-need census tracts[2]. These sites present a great opportunity to address the lack of open space in Boyle Heights. The pair of adjacent public lots to the west of Soto Street could be assembled into a neighborhood park of over 2 acres in size. This would be an opportunity for senior-oriented facilities and an intergenerational playground. There is a second group of public available lots near Washington Blvd that provides another opportunity for developing a senior-focused park.

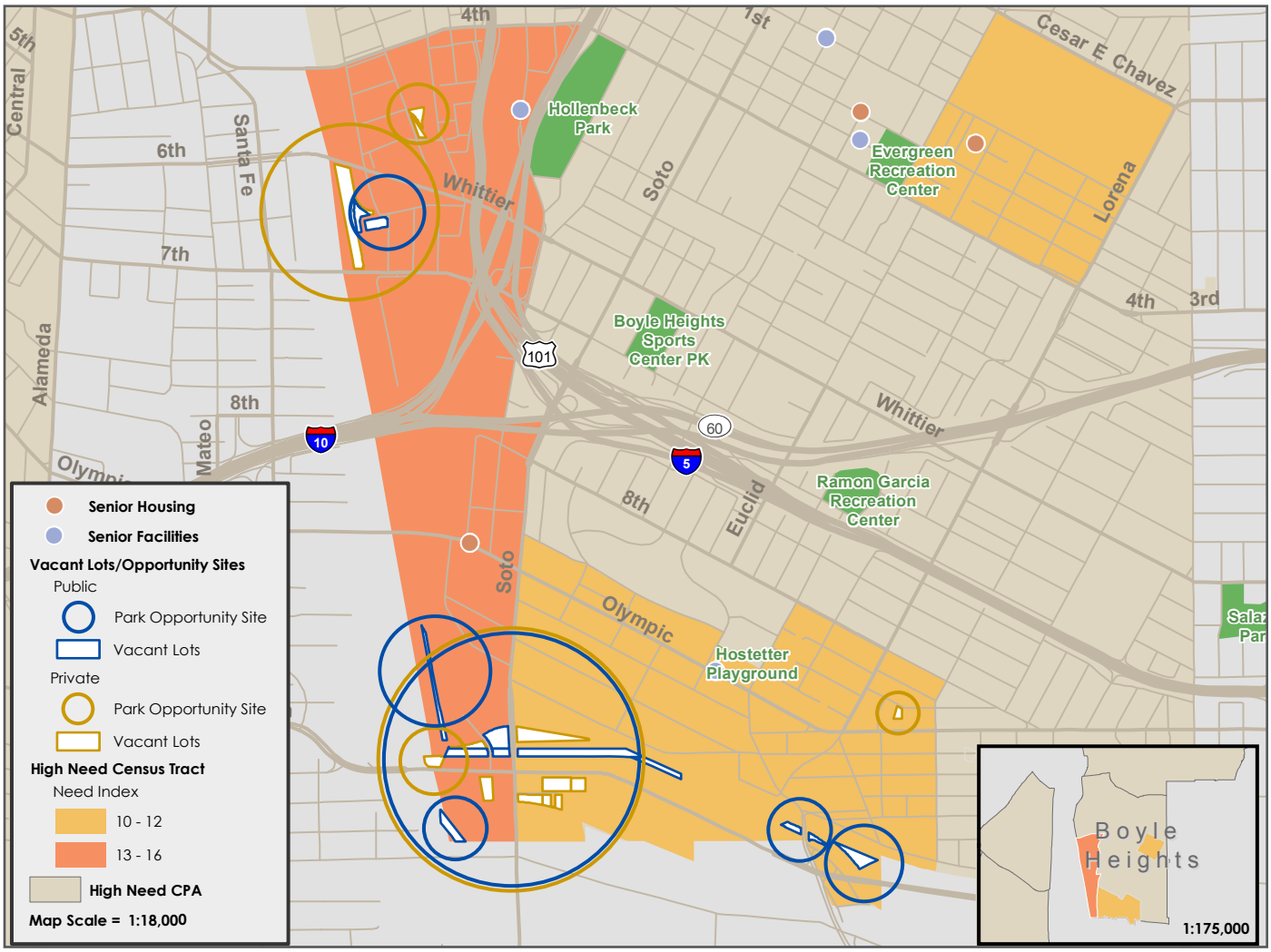


Figure 18: Boyle Heights opportunity sites

2 "Highest need" census tracts are defined as census tracts without park access that have a sPNI score of 10 or higher.

Hollywood

The Hollywood Community Plan Area includes five privately-owned park opportunity sites and one publicly-owned site. All lots are relatively small and can fit a mini-park. The public vacant lot is located near a senior housing facility north of Santa Monica Blvd and just east of Vermont Ave. Because of the location and public sector ownership, this lot likely presents the best opportunity for the development of a senior-focused park in the Hollywood Community Plan Area.

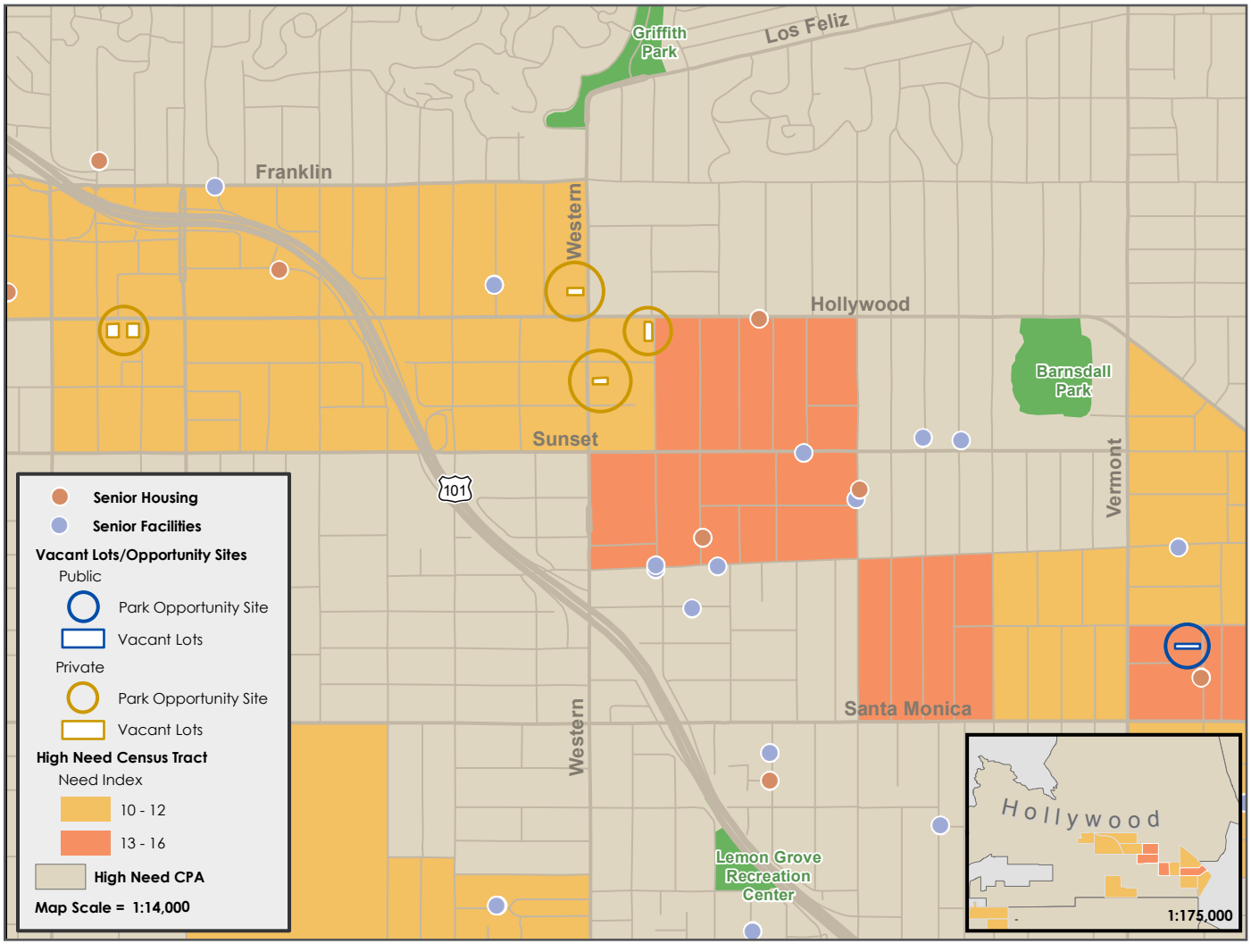


Figure 19: Hollywood opportunity sites

Palms

Within the three highest need tracts in the Palms – Mar Vista – Del Ray Community Plan Area, there are two privately-owned small sites; both of which are less than half-acre. The site near Washington Pl., one block east of Centinela Ave, provides the best opportunity for the development of a senior-focused park because of its proximity to senior-affordable housing units.

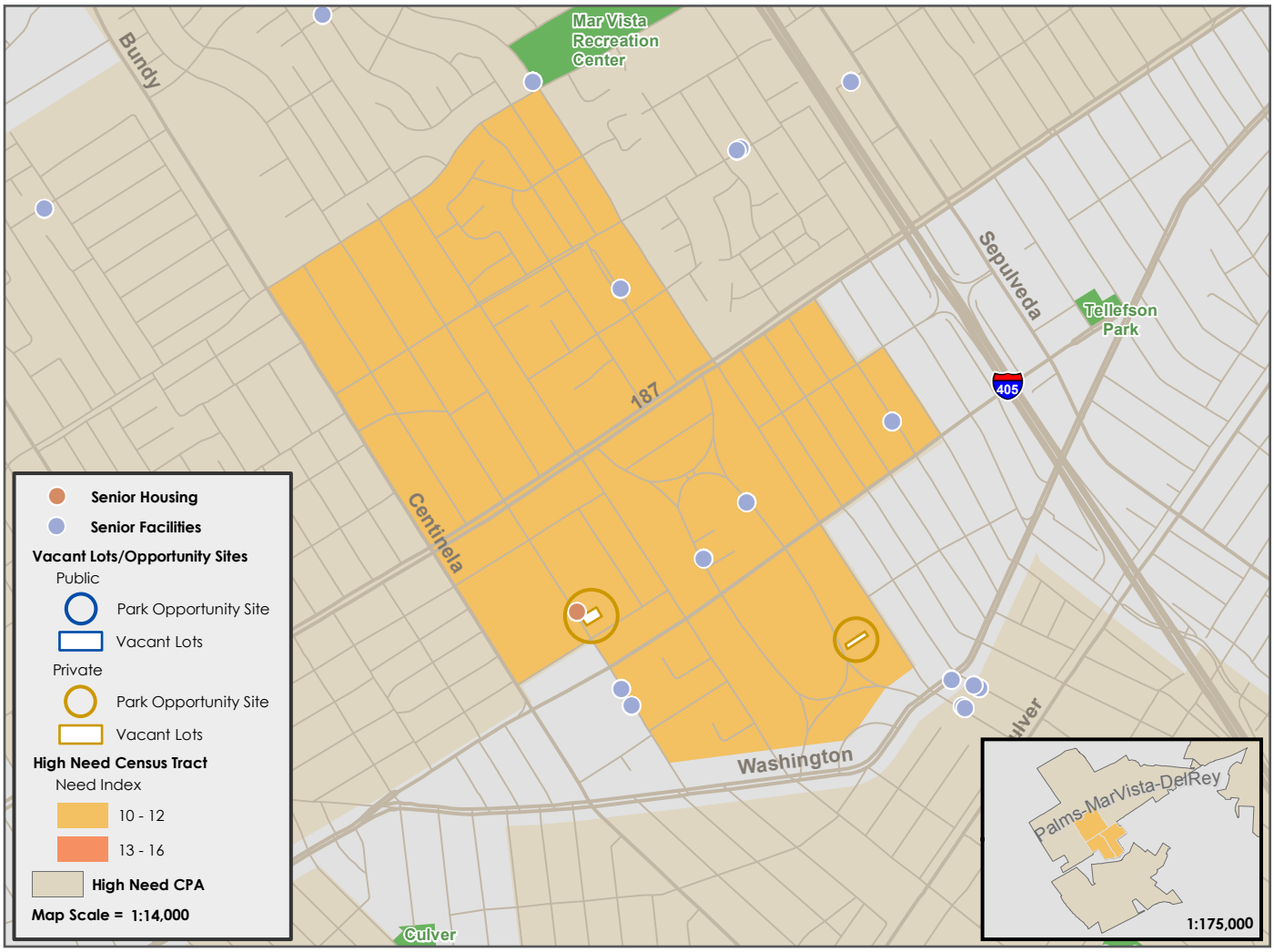


Figure 20: Palms opportunity sites

South and Southeast Los Angeles

The maps for the South Los Angeles and Southeast Los Angeles Community Plan areas are combined and then split into the northern and southern portions.

South Los Angeles

There are four vacant lots within the six highest need tracts in South Los Angeles. All these lots are privately owned and smaller than one acre. Three of the four lots are proximate to senior housing units.

- Near the intersection of Jefferson and Arlington boulevards
- Near Figueroa St. and Vernon Ave.
- On Vermont Ave. north of Manchester Ave.

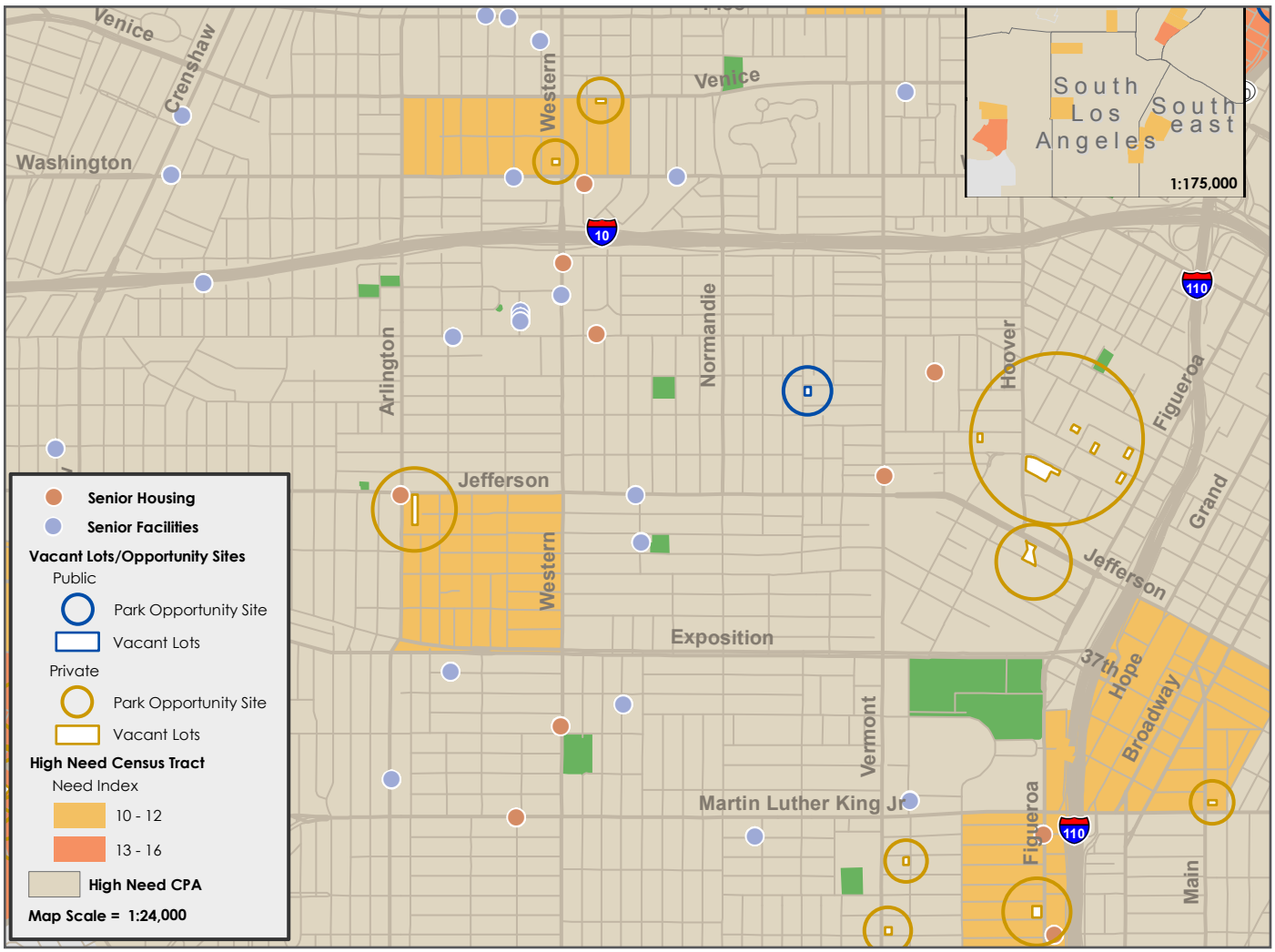


Figure 21: South and Southeast Los Angeles - North

Southeast Los Angeles

There is only one vacant lot available in the one highest need tract in Southeast Los Angeles. The lot is privately owned and small at just over a quarter-acre. This instance is not a strong case for a senior-oriented park.

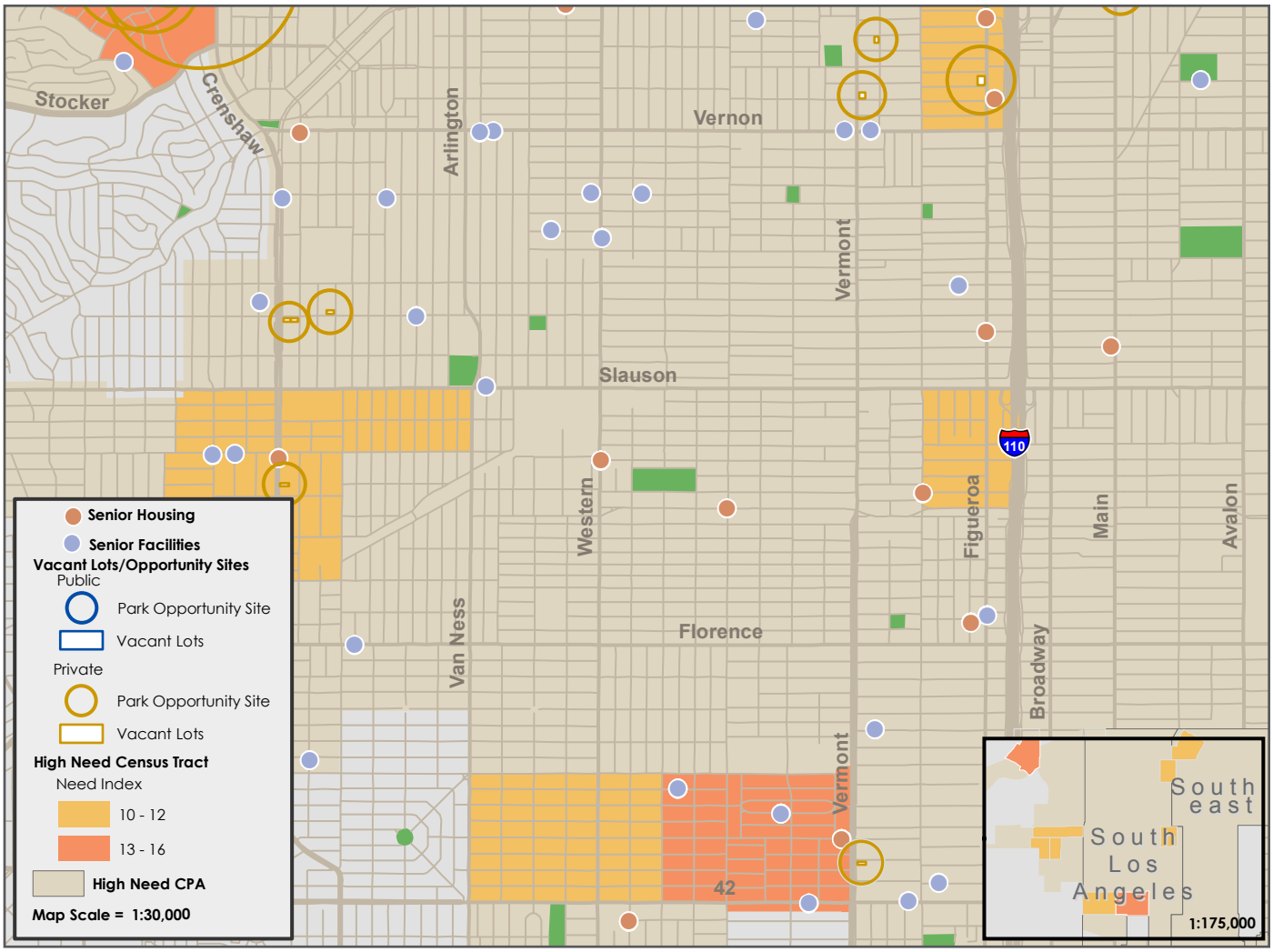


Figure 22: South and Southeast Los Angeles - South

West Adams

We found 11 park opportunity sites with one publicly owned lot in the West Adams – Baldwin Park – Leimert Community Plan Area. This public lot is small, only 0.26 acres, and is near a skilled nursing facility, west of Crenshaw Blvd. This is a great opportunity for the development of a mini-park that can serve seniors using this facility, who can also provide some input on what they would want to see in a senior-focused park.

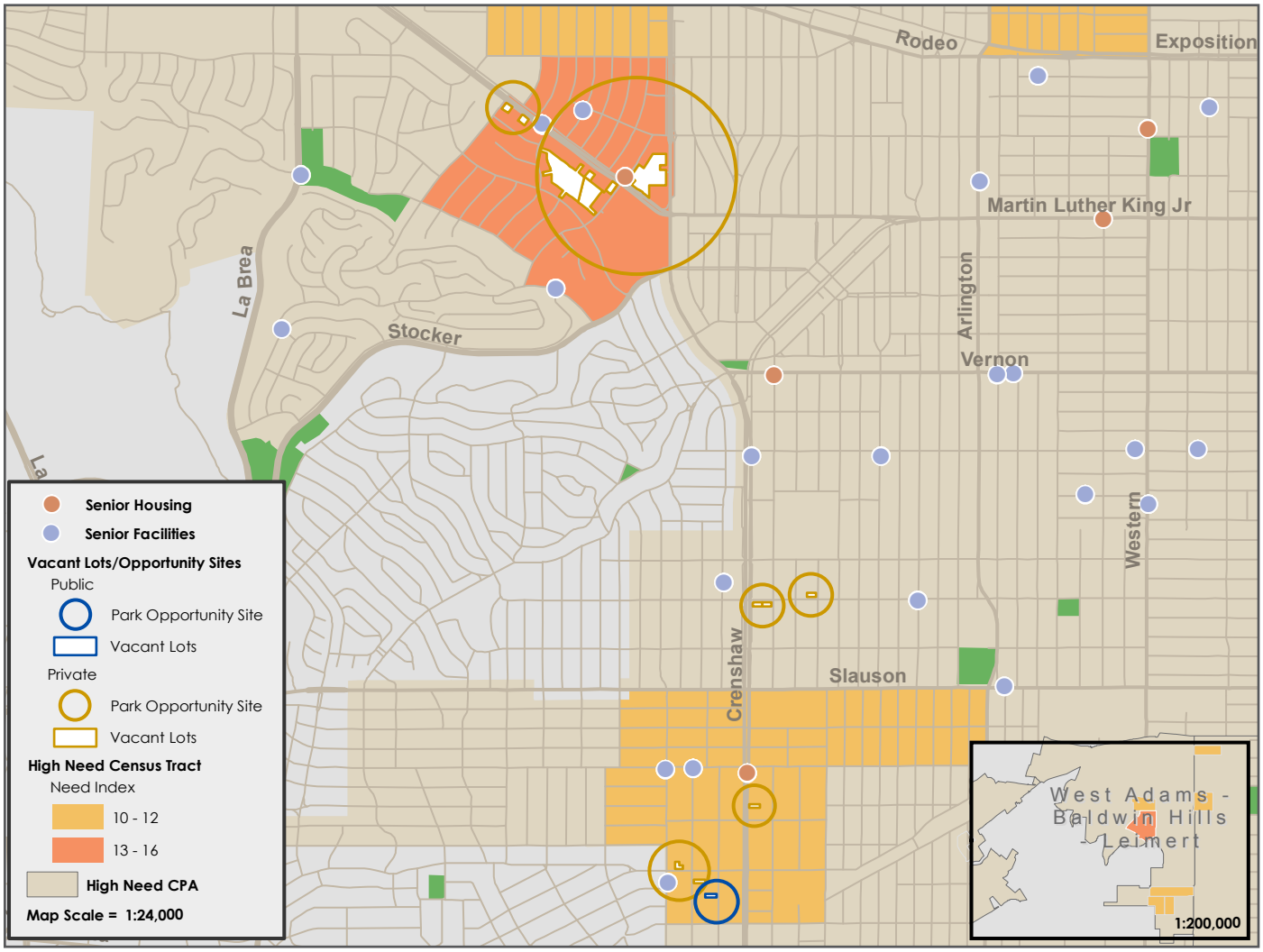


Figure 23: West Adams opportunity sites

Westlake

There are five opportunity sites in the Westlake area including one publicly-owned site. All the vacant lots in these highest need tracts in Westlake are small; less than a half-acre. The most promising site for a senior-focused park is a publicly owned lot in a highest need tract of Westlake, just north of Olympic Blvd and west of the 110 freeway at Blaine St.

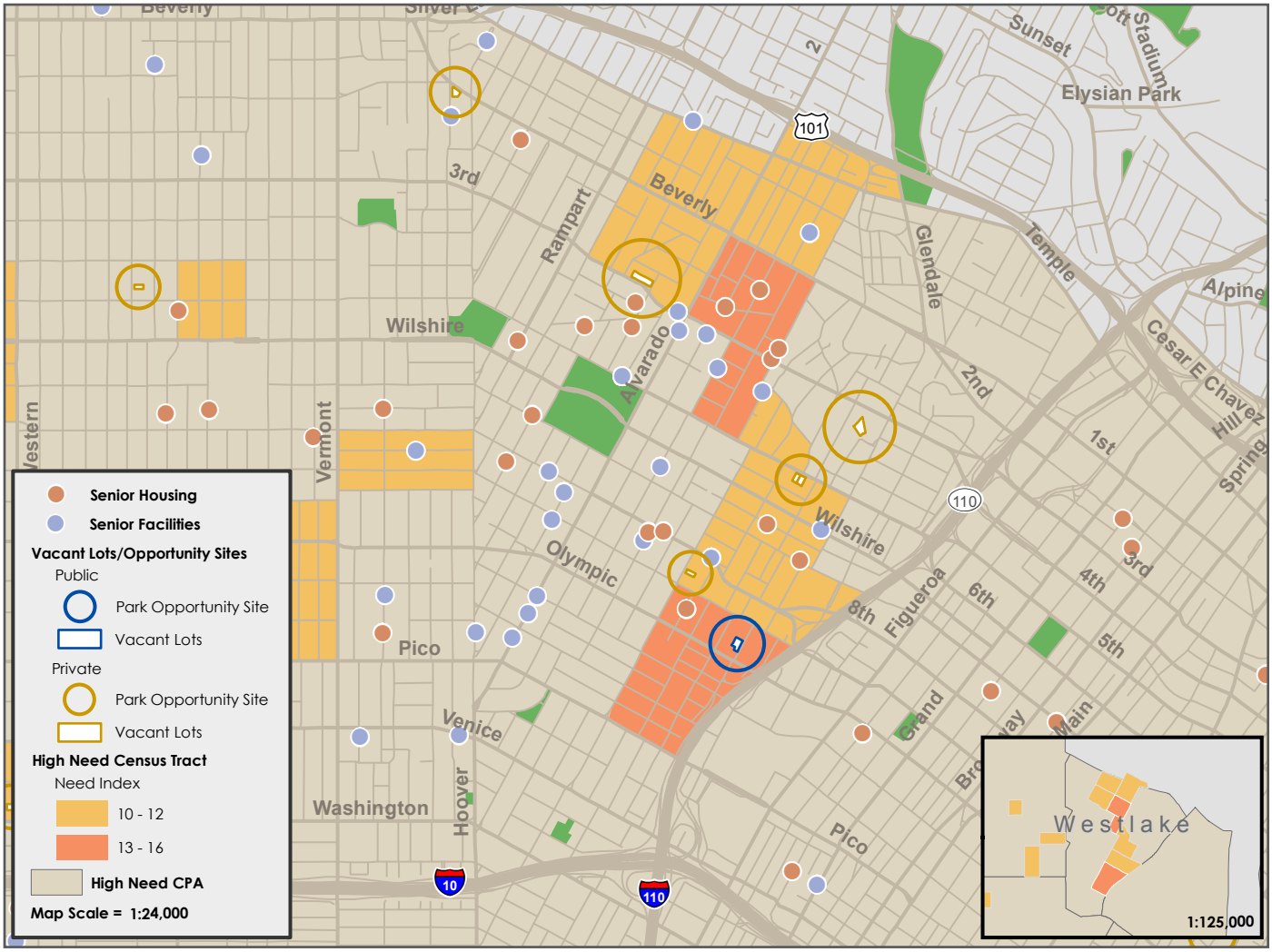


Figure 24: Westlake opportunity sites

Wilshire

There are five park opportunity sites in the highest need tracts in the Wilshire Community Plan Area, all privately owned. Four of these lots are small and can only fit a mini-park, while one is two-acres and can fit a neighborhood park. However, the price of purchasing so much private land may be cost prohibitive for the City. The four mini-park vacant lots may, therefore, present better opportunities to develop small parks in the Wilshire area. The best opportunity in this area is offered by a lot located between two senior housing facilities, near the intersection of Wilshire and Western.

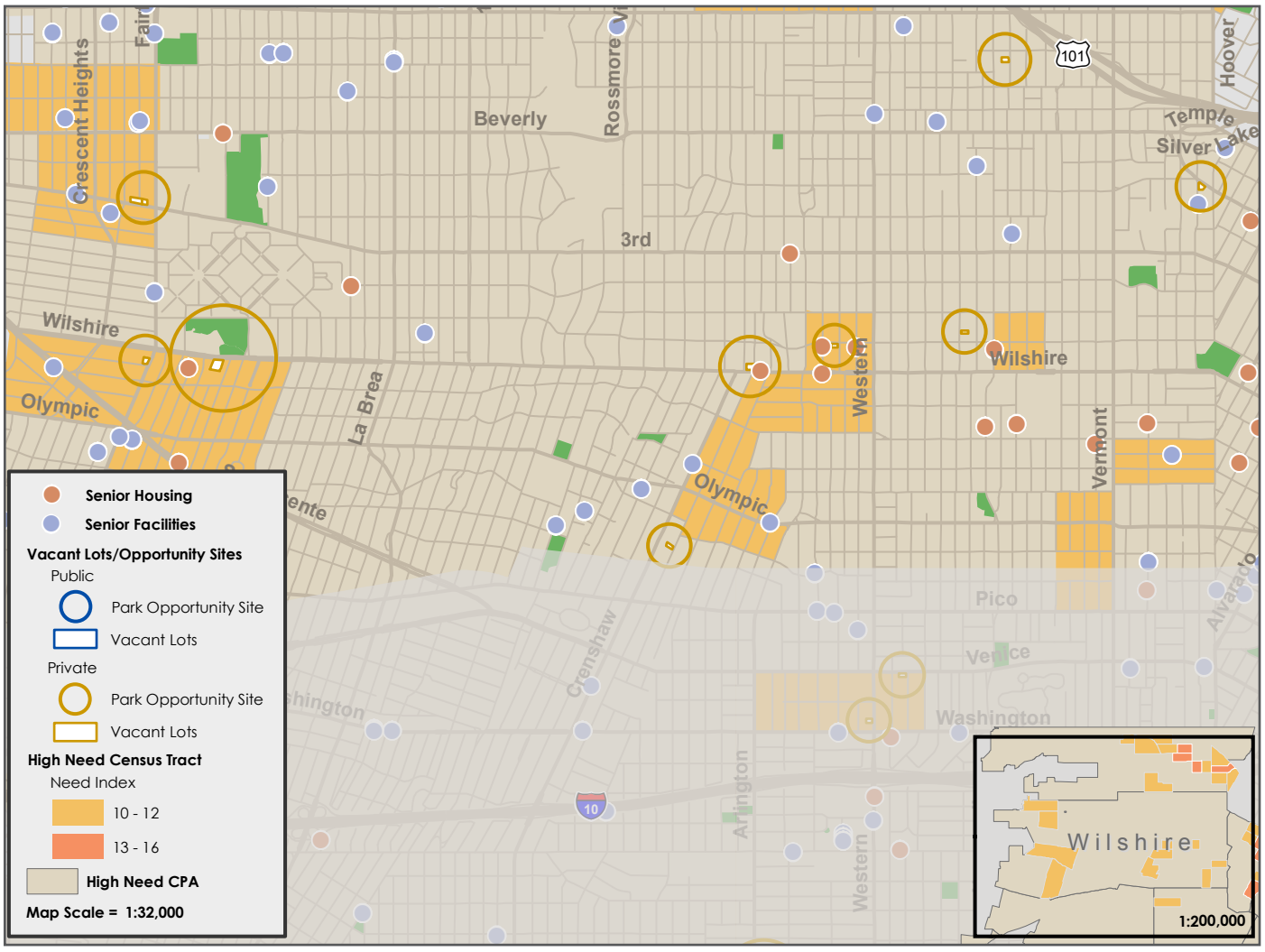


Figure 25: Wilshire opportunity sites

Vacant Lot Analysis - Conclusion

Boyle Heights has the most publicly owned sites, which if assembled, can be developed to become fairly large multi-generational parks. The next best opportunity lies in the other publicly owned lots in Hollywood, Westlake, and West Adams. The third best opportunity is for strategically selected privately-owned lots in any of the highest need areas, where these lots are directly adjacent to senior-housing or senior-oriented facilities.

UPCOMING PARK OPPORTUNITIES

UPCOMING PARK OPPORTUNITIES

In 2013, the City of Los Angeles Department of Recreation and Parks launched its "50 Parks Initiative". This initiative was born from the 2009 Citywide Community Needs Assessment for all parks and open space within the City of Los Angeles (City of Los Angeles, 2009). The top request from this assessment was to increase the amount of green space within the City. The City took advantage of the economic downturn and began acquiring vacant parcels of land to convert them into new parks and open spaces. For the purposes of our project, we mapped the 58 sites of this initiative, also indicating their current project status (Figure 26).

Three new park sites fall within our designated highest-need census tracts: Carlton Way Park, Lexington and Madison Park and South Victoria Avenue Park. The Carlton Way Park and the Lexington and Madison Park are both located in Hollywood. The South Victoria Avenue Park, in the West Adams CPA, is located near Crenshaw Boulevard, north of the City of Inglewood.

The Carlton Way site is completed as of this writing, while the other two sites are slated for construction in fiscal year 2017-2018. The City of Los Angeles should focus on including senior-friendly design features in both the Lexington and Madison Park and South Victoria Avenue Park. These two projects present great opportunities to improve the quality of life for seniors living near these two upcoming parks.

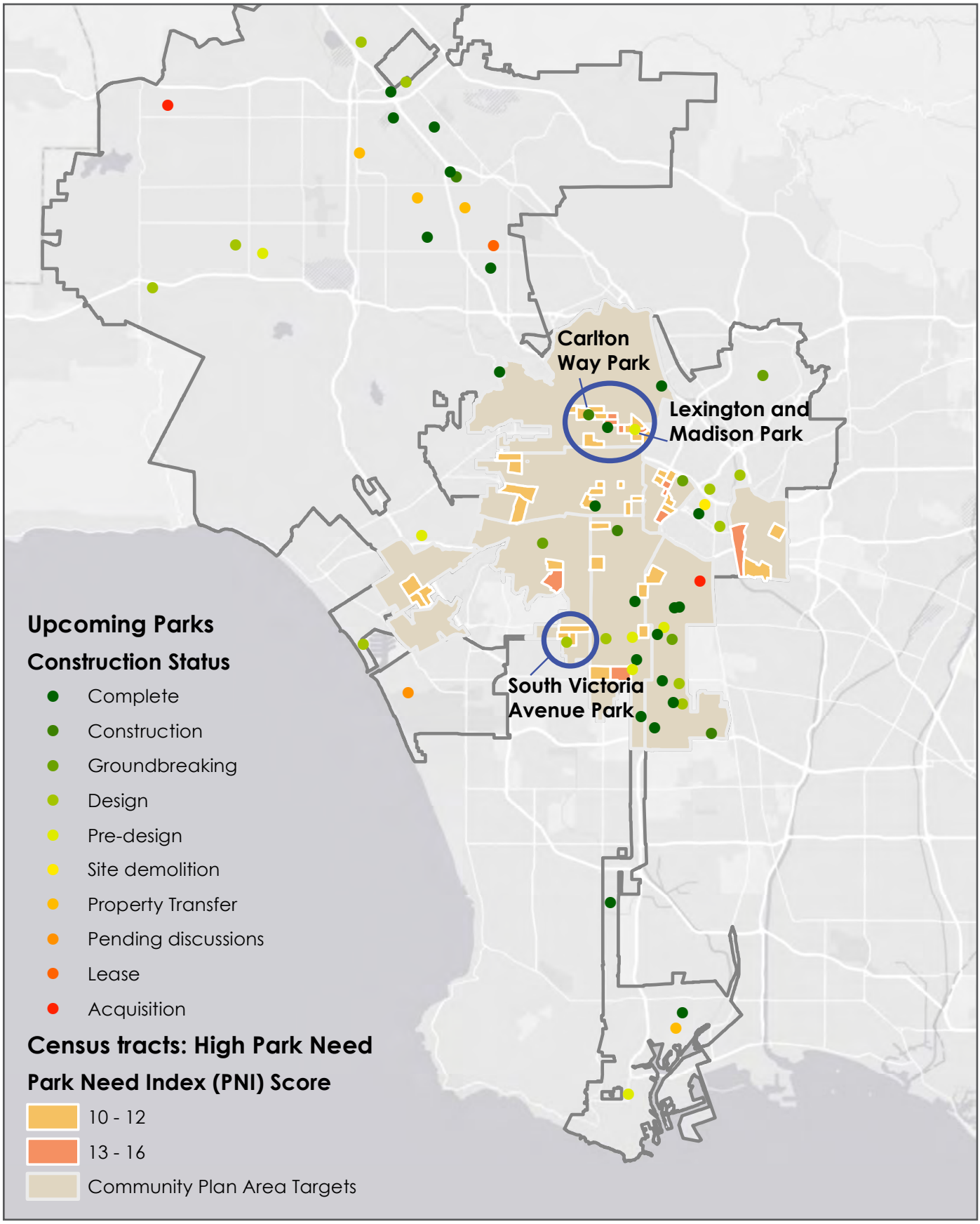


Figure 26: Upcoming parks by status

CONCLUSION & POLICY RECOMMENDATIONS

CONCLUSION & POLICY RECOMMENDATIONS

Parks and open spaces represent rather scarce resources for Los Angeles urban neighborhoods; residents in a large number of census tracts do not have a park within a half-mile distance from their residence (Figure 1). As scholars have shown, parks are also unevenly distributed throughout the city (The City Project, 2011; Wolch 2005). A number of studies have highlighted the inequities in the park distribution of Los Angeles experienced by certain social groups, such as ethnic/racial minorities and low income residents (Sister et al. 2007; Sideris and Stieglitz 2002; Loukaitou-Sideris and Sideris, 2010). However, very little work has gone into documenting issues of demand and supply of park space for older adults.

This project set out to find opportunities for building senior-friendly parks in the City of Los Angeles. Taking into consideration areas of high concentrations of seniors (as evidenced by the number of residents over 65, senior housing developments, and senior service facilities), we first identified census tracts with the greatest need for senior-focused parks. We gave particular emphasis to low-income seniors, under the assumption that they need public open space more than higher income seniors, who have better access to private open spaces and back yards. Thus, while we found concentrations of seniors in many neighborhoods of the San Fernando Valley and the Westside, ultimately, the 48 census tracts that emerged from our analysis as having the highest need for parks (sPNI scores of 10 or higher) were in eight Community Plan Areas, roughly covering the mid- and central-city areas of Los Angeles, as well as Hollywood, Westlake, South LA, Southeast LA, and Boyle Heights (East LA) as seen in Figure 9.

Developing urban parks requires space that is often difficult to amass in highly built-up urban areas. This problem is compounded by the fact that acquisition of land for park development is costly in Los Angeles, where the cost of urban land is among the highest in the nation. These high land values are a part of the reason why the City of Los Angeles is far behind other major cities in the US in park acreage per capita (Harnick 2000). For these reasons, we sought to identify existing vacant lots within the 48 census tracts of highest park need for seniors, and deemed that the City should first look at its publicly-owned vacant lots as opportunities for the development of parks. We identified a total of 14 publicly-owned lots in the highest need census tracts representing a total of 13 acres (Table 7). We further prioritized these sites, based on their particular locations and proximity to senior housing and facilities.

Findings from this study lead us to offer the following recommendations for the City of Los Angeles and other municipalities and nonprofit organizations wishing to develop senior-focused parks.

1

Identify locations of highest need by taking into account not only the lack of existing neighborhood park space but also the concentrations of seniors and senior-focused facilities in the area, as well as the level of neighborhood affluence.

Previous research has demonstrated that how far someone lives from a neighborhood park influences his/her use of the park (Cohen et al. 2007). This is particularly true for older adults, who often experience a decrease of their mobility levels as they age. It is, therefore, important that senior-friendly parks are located in close proximity to seniors' places of residence or other settings frequented by seniors (e.g. seniors centers and facilities). They should also ideally be a half-mile or less from places that seniors use throughout the course of a week. In an era of limited municipal fiscal resources, we suggest the prioritization of lower-income neighborhoods over more affluent neighborhoods for park development. These less affluent areas can be favored on both equity grounds —low-income neighborhoods typically have less parks per capita (Heynen et al. 2006)— as well as on efficiency grounds—low-income neighborhood parks often receive higher usage than parks in more affluent neighborhoods, where people have greater access to private open space (Loukaitou-Sideris and Sideris 2010).

2

Identify the total number of vacant lots (both under public and private ownership) that are located in census tracts of high park need.

In dense urban settings, empty lots represent opportunity sites for park development. For this reason, some cities and nonprofit groups have started creating inventories of empty lots, which include location and size characteristics, and ownership status.

3

Explore the potential of conversion of identified empty lots into senior-focused parks.

The lots in the aforementioned inventories should be prioritized in terms of desirability, cost, and ease of conversion into park space. The characteristics of the lot (location, size, cost of land, cost of any pollution remediation activities, etc.), as well as the socio-demographic characteristics of the neighborhood should drive the prioritization process. While the development of empty public lots into parks may cost less, municipalities should also explore purchasing private vacant lots, if the latter provide unique opportunities for the development of senior-focused parks.

4 **Develop senior-friendly parks on highly accessible sites.**

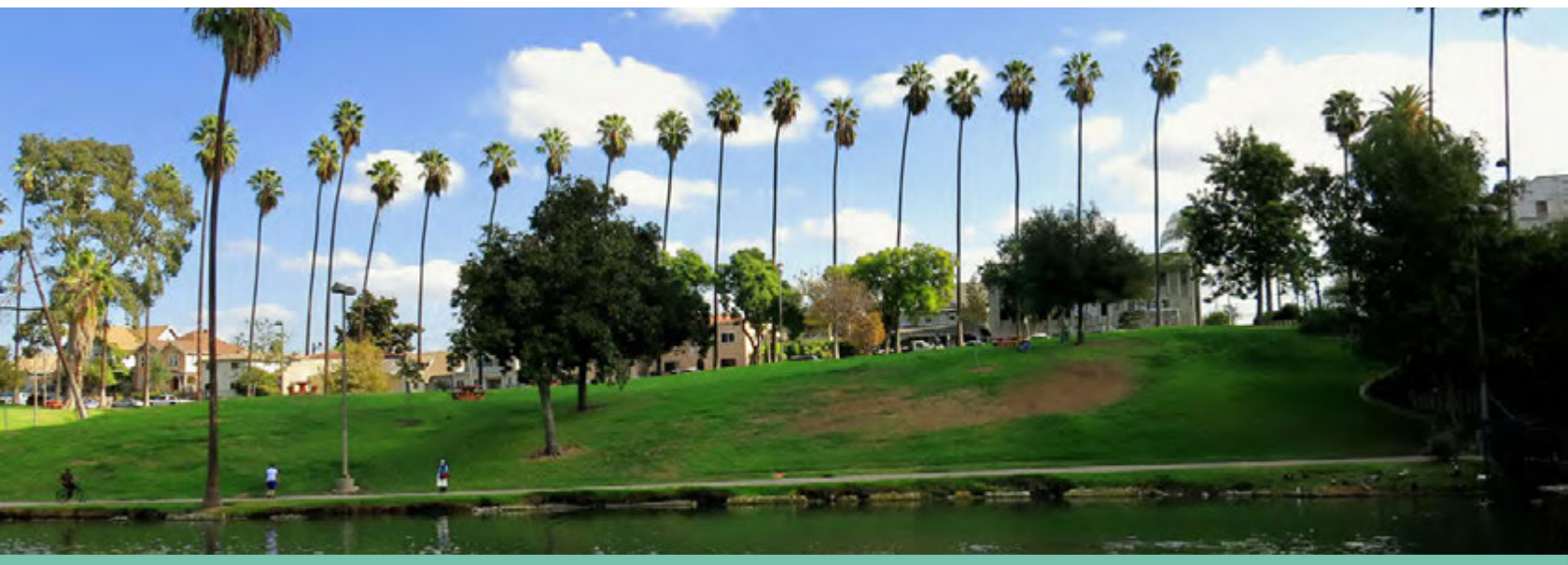
The assessment of site accessibility was not part of the scope of this study. Nevertheless, this is an important factor in evaluating the appropriateness of a site for the development of a senior-friendly park. Seniors wishing to visit a park site on foot, by bus, or private car would need good sidewalks with crosswalks connecting the park to the surrounding neighborhood, bus stops in close proximity to the park, and parking areas with handicapped parking spaces. We hope to pursue this venue in future research.

5 **Explore the opportunities for the development of small lots into mini-parks.**

While larger lots provide the opportunity of offering a wider number of settings and facilities in a park, this study showed that most empty lots are likely to be less than one acre. The utility of these small lots (especially if they are over ¼ of an acre) should not be underestimated; creative design can transform them into green respites in a neighborhood, places for socialization and enjoyment.

6 **Incorporate senior-friendly urban form and landscaping elements in the design of a new senior-focused park or the retrofit of existing parks.**

While the location of a park can serve as an attractor for seniors, the types of settings, facilities, and services included in the park will play a big role if seniors would like to visit it. While park design was outside the scope of this study, it was the focus of our earlier work Placemaking for an Aging Population: Development of Senior-Friendly Parks.



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