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SPF 50: Safe and Prosperous Futures Preparing for the Mid-century Climate Reality

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TreePeople

SPF 50: Safe and Prosperous Futures

Preparing for the Mid-century Climate Reality





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SPF 50: Safe and Prosperous Futures

Preparing for the Mid-century Climate Reality

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Thank you to the City of San Fernando residents for their participation.

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Introduction

The Safe and Prosperous Futures Project, SPF 50, is the third and final phase of a multi-year project led by TreePeople entitled *Cooler and Healthier: Reducing Heat-Health Risk Using Urban Forestry & Stakeholder Engagement*. The overall project aim is to address heat exposure by 1) developing a model analysis and processes to assess heat-related mortality and morbidity, 2) creating strategies to address heat effects by canopy increase and albedo changes in the built environment, and 3) conducting stakeholder engagement to develop culturally relevant climate adaptation responses. Earlier phases of the project resulted in the publications *RX for Hot Cities 2* (TreePeople, 2023a), and *Cooler and Healthier* (TreePeople, 2023b).

SPF 50 sought to understand how San Fernando residents perceive and envision climate resilience in their community in the coming decades.

Project activities, consisting of individual interviews, a group workshop, and community outreach events, were centered around actively listening to community perspectives and facilitating opportunities for resident-driven dialogue. This report includes an overview of the process, resident-identified priorities and opportunities, and a locally adapted climate resilience resource guide that was built in response to participant requests. The recommendations section includes lessons learned and offers broadly applicable guidance for developing locally appropriate climate resilience strategies on the community level.



San Fernando Context

San Fernando, CA, is a 2.4 square mile city with approximately 23,000 residents located in the San Fernando Valley in Northwest Los Angeles County. Surrounded by the city of Los Angeles, an independent groundwater supply facilitated San Fernando's incorporation in 1911. Average annual household income is \$60,655, roughly in line with the rest of Los Angeles County (U.S. Census Bureau, 2022). Most residents (93%) identify as Latino or Hispanic (U.S. Census Bureau, 2022).

As a small municipality surrounded by a vast patchwork of Los Angeles neighborhoods, San Fernando is home to many long-time residents and has a history of independent governance. In conversations with residents for this project, many highlighted the value of living in their small town within a large city. They described a clear distinction between the sense of community they have in San

Fernando compared to City of Los Angeles residents, many of whom live blocks away. San Fernando's unique identity as a "city-community" influences residents' day to day experiences and sense of connection to their neighbors, and may present a unique opportunity for citizen engagement with local governance.

San Fernando experiences disproportionate exposure to extreme heat compared to Los Angeles County, a trend that is projected to intensify in the coming decades. In the mid-century (2035-2064), San Fernando is projected to experience 111 days over 90 degrees Fahrenheit, compared to a projected 74 days for LA County overall ([California Healthy Places Index, Extreme Heat Edition, Public Health Alliance and UCLA Luskin](#), 2022). In their 2022-2027 Strategic Goals, the San Fernando city council highlights climate resilience and

environmental justice as a key focus ([San Fernando Strategic Goals 2022-2027](#)). Outlined strategies to advance this goal include a focus on expanding and caring for tree canopy, safeguarding the local water supply, reducing local carbon footprint, and facilitating climate adaptation and mitigation efforts in San Fernando.

San Fernando has a city-wide tree canopy cover of approximately 19%, on par with the LA County average (Los Angeles County Tree Canopy Advanced Viewer, 2016). Tree canopy is not distributed equally throughout the city. Neighborhoods in the Northwest and Southwest have higher canopy cover, while areas in the center and Northeast regions of the city have low coverage (Figure 1).

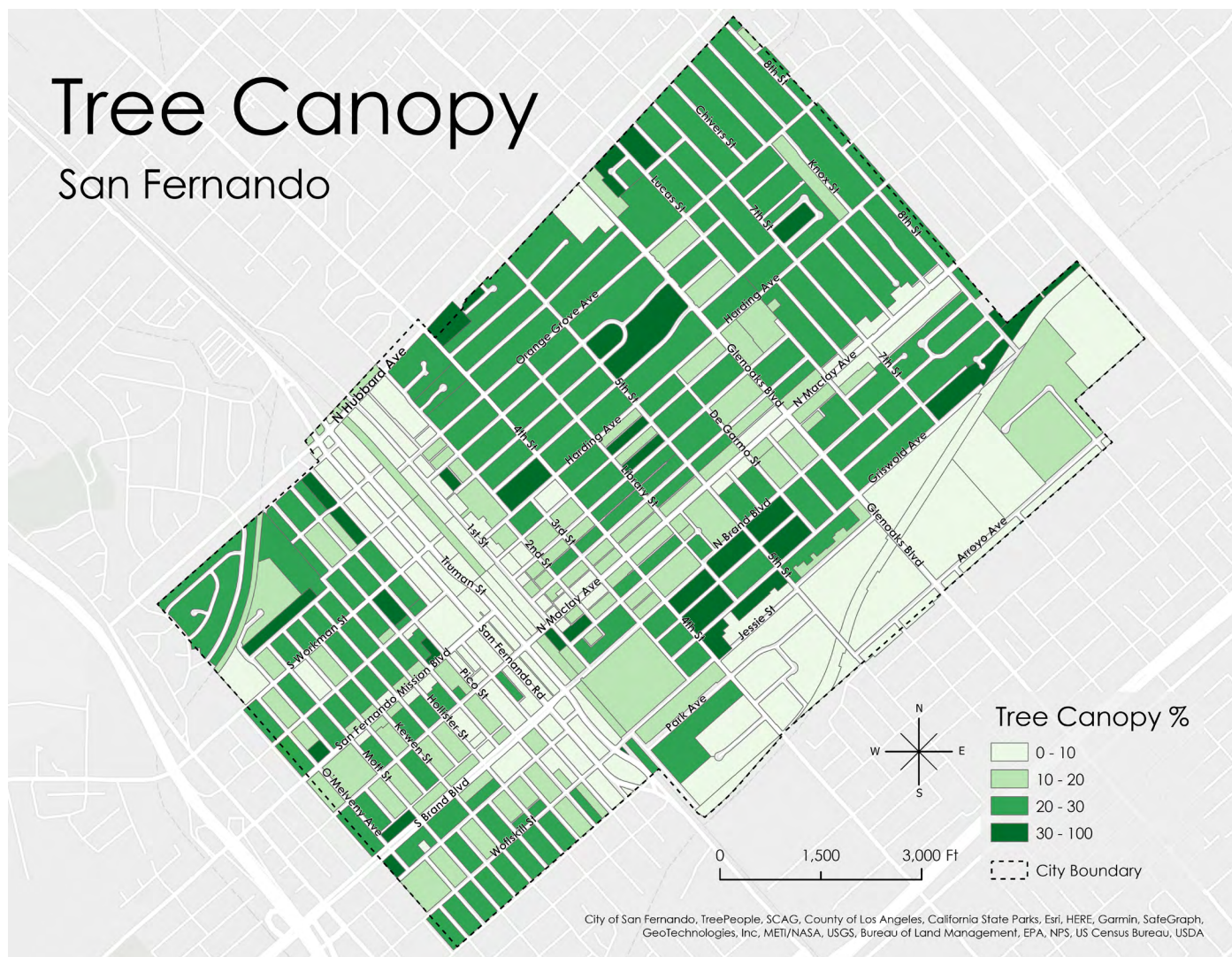


Figure 1. Canopy Map from the San Fernando Urban Forest Management Plan, 2024.

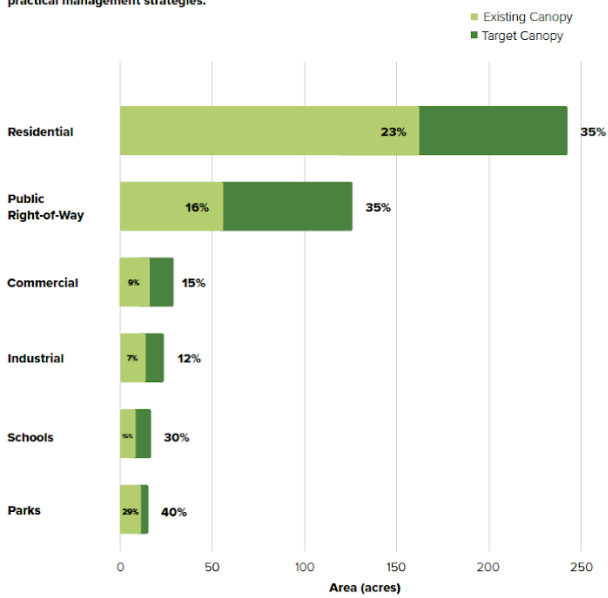
In collaboration with the City, TreePeople has planted over 900 trees in the right-of-way in recent years. In 2023, with support from CalFIRE, TreePeople worked with the city to meet their stated strategic goal of creating an Urban Forest Management Plan to guide long term care for the City’s trees. The plan includes an inventory of the current forest, opportunities and guidance for forest expansion and maintenance, with a target canopy cover of 30% citywide by 2073 (Figure 2).

While developing the Urban Forest Management Plan, TreePeople heard that many San Fernando residents recognize and value the heat mitigation potential of tree canopy. In a community survey (104 respondents) administered through canvassing and educational workshops in Spring 2023, residents ranked shading and cooling as the most important urban forest benefit, with the facilitation of outdoor activities, climate resilience, and mental health also ranking highly (San Fernando Urban Forest Management Plan).

San Fernando's Future Forest

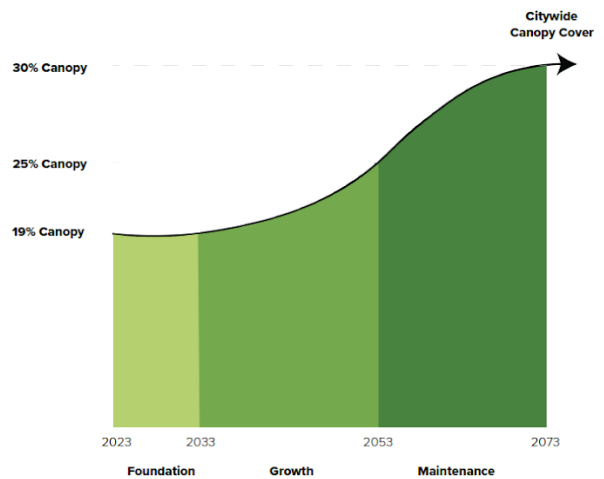
GOALS AND STRATEGIES

San Fernando's canopy goals are set to be achievable yet **ambitious and meaningful**, focused on **where canopy is needed**, and grounded **with practical management strategies**.



Bar length depicts how many acres of canopy cover is represented in each land use category.

Canopy targets by land use combine to achieve the citywide target in a way that integrates community priorities on where canopy is needed most.



The pathway to realizing the future forest of San Fernando is divided into three management phases: Foundation, Growth, and Maintenance.

Figure 2. Long term urban forest canopy targets by land use in the San Fernando Urban Forest Management Plan.

Methods

Interviews

Residents who participated in the previous *Cooler and Healthier* study were invited to participate in this project (see de Guzman et al. 2023). This comprised 98 households that received a postcard (Appendix A) with a brief description of the project and an invitation to sign up for an interview in Spanish or English. In recognition of the time and expertise required for participation, interviewees were offered a \$200 gift card. Seventeen participants completed interviews, which took place for the most part on weekday evenings and Saturday mornings at the picnic tables in local Las Palmas Park (Figure 3). Two interviews were conducted in Spanish, and 15 were conducted in English.



Figure 3. Shaded picnic tables outdoors in Las Palmas Park, City of San Fernando. Las Palmas Park, site of community interviews.

Interviews consisted of a semi-structured dialogue followed by a conceptual content cognitive mapping (3CM) activity, referred to for this project as “Mental Mapping” (Kearney & Kaplan 1997, Romolini et al. 2012). Before beginning, the interviewer reviewed the interview process and goals of the project. Each participant reviewed and signed a consent form before beginning participation. Interviews lasted approximately one hour, and began with semi-structured questions about resident perspective on the past, present, and future climate in San Fernando, and their concerns and hopes for the future (Interview Guide, Appendix B). All interviews were completed between May and June 2023.

The mental mapping exercise asked participants to describe everything that came to mind in response to the following question:

“What does local climate resilience mean to you?”

The interviewer recorded concepts, ideas and themes as participants spoke on note cards. When the participant had shared all of their thoughts, the interviewer asked them to organize the cards into groupings and provide titles as needed in order to produce an accurate “map” of their understanding of climate resilience in San Fernando. The conversations were audio-recorded, and the interviewer photographed the final map (Photos of individual concept maps, Appendix C).

Our team has successfully used this approach in previous research related to concepts of environmental stewardship (Romolini et al. 2012).

A core benefit of the mental mapping approach is the focus on the participant's perspective and experience, the process allows them to explore their own ideas on a particular topic, rather than presenting outside ideas and asking for a response. The approach supports broad thinking, can produce more accurate assessments of knowledge structure, and often supports the discovery of new ideas and relationships between concepts (Kearney & Kaplan 1997). The choice of outdoor picnic tables at a local park for the interviews was intended to ground the conversation in relevant context and elicit more specific concepts (Jones et al. 2014). Las Palmas park was selected for its central location, frequent use by a broad range of community members, and proximity to public transit.

Workshop: From Individual Perspectives to Community Dialogue

All interview participants were invited via email and phone calls to attend a workshop to review the findings and discuss shared concerns, priorities, and ideas with each other. A \$200 gift card thank you per participant, dinner, and activity table for kids were arranged to recognize the time commitment and effort involved. A certified Spanish interpreter attended the workshop, and all presentation and activity materials were offered in both Spanish and English. Fifteen of 17 interviewees attended the workshop, and one family brought their children to the event, which was held at the Las Palmas Park community facility in September 2023.

The two-hour workshop began with introductions in which community members were invited to discuss in pairs what drew them to get involved with the project. They reported back to the group by introducing their discussion partner and sharing their

motivations for participation. The activity provided a point of connection for participants, established a space for listening and dialogue, and provided a structured activity for attendees to voice their key concerns up front. Next, researchers shared a presentation with context for Proposition 68, an overview of the research process, and common themes heard in the interviews. A strong sense of connection to and appreciation for the unique sense of community in San Fernando was identified as a recurring theme in the interviews, as well as a core group of frequently cited concerns for the future. The concerns mentioned most frequently in the interviews were: Heat, Housing, Pollution, Wildfires, Transportation, Changes to the Climate, Flooding, Drought, and concern for younger generations.



Figure 4. Concerns For the Future cited most frequently in the interviews.

Heat

"...is this going to be a livable place? I mean, we already know the valley gets hot, but this corner of the valley gets even hotter."

Transportation Challenges

"So you have to get a car and the affordable cars are the gas suckers. They're diesel, they're... Yeah, it's tough to get to places in transport, public transport if it's more than maybe a half hour away."

Changing Climate

"I'm concerned that the summers are going to be longer and hotter."

Drought

"Will we be able to sustain our grass green or trees growing and blooming? ...You know. Will we have enough water for that?"

Concerns for Children's Future

"I mean, my son is a grown adult now. But even looking at these kids here, I mean what, what awaits them by the time they're in their, you know, adult years?"

Wildfires

"That's my biggest fear. that we continue to have these wildfires and it's gonna affect the air and our health. I mean, we're a small community, but we're in a large place."

Community members then formed small groups to complete a collaborative card sorting and mapping activity building upon the individual mental mapping they completed in their interview. The research team provided cards preprinted with the most frequently cited concepts from the interviews in four themed stations: **1) San Fernando's Strengths, 2) Barriers to Climate Resilience in San Fernando, 3) Personal Actions for Climate Resilience, and 4) Community Actions for Climate Resilience.** Participants moved

through each station in small groups. With a member from the research team acting as facilitator, groups were asked to sort the concept cards they found on each themed table into a new map, add or remove new concept cards to reflect their small group discussion, and provide titles to organize their collaborative maps. With consent from the group, facilitators captured photographic documentation of the new maps created by groups, and audio recordings of the dialogue process (Figure 5).

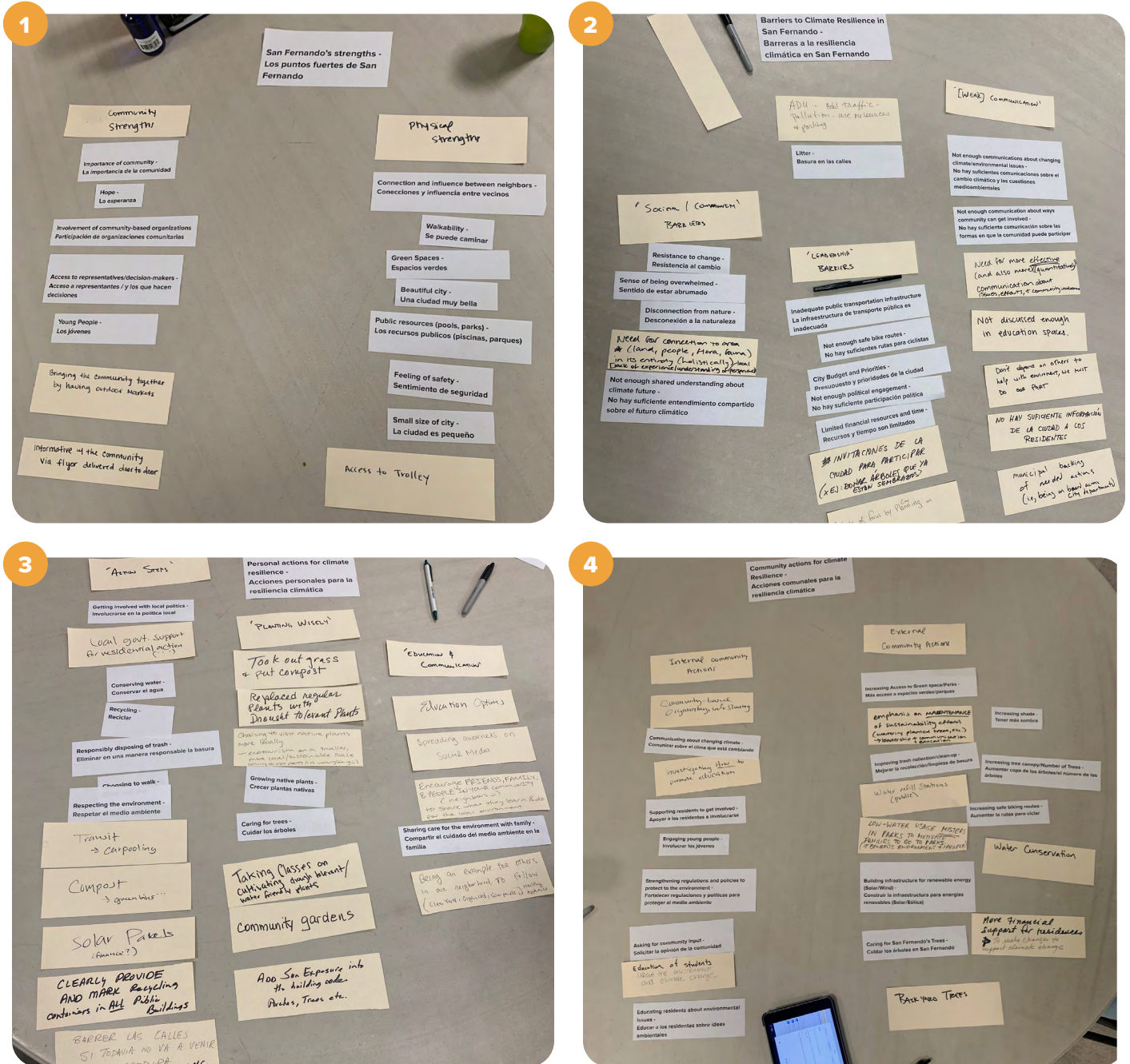


Figure 5. Photos of maps created by groups in the Workshop. Pre-printed cards represent concepts from the interviews, hand-written cards represent original concepts added during the group discussion. (All workshop maps, Appendix D).



In the workshop setting, the mapping activity provided structure for constructive dialogue. In engaging with the concepts anonymously presented on the cards, community members were able to engage with some of their own ideas in conversation with new ideas from their neighbors. The small group format with structured facilitation provided an opportunity to discuss community members' reasoning as they made decisions together on how to organize and title the maps. Collaborative mapping facilitated development of community-level solutions that are in conversation with shared personal concerns and desires for the future.

Data Analysis

Thematic analysis was performed on the transcribed interview and map data. Each transcript was independently coded by at least two researchers. Codes were discussed and refined throughout the transcription process by all members of the research team. A frequency analysis was performed on codes identified in interview transcripts, as well as mental maps. Codes identified in 5 or more interviews were organized thematically by the research team to identify patterns. Two researchers from the team conducted a meta-sort of the codes from the mental maps. Utilizing these inputs, the research team sorted independently, cross-referenced, and compiled category titles: Concerns for San Fernando's future, San Fernando's strengths, Barriers to climate resilience in San Fernando, and Actions for climate resilience on the household level and on the broader community level. Following the workshops, the research team conducted thematic analysis on the transcribed group discussion and the map data.



Findings

Interview Outcomes

The interview questions elicited four major areas of thinking from participants about their community of San Fernando: what they appreciate about San Fernando, their hopes for the community, what their primary concerns are for the future, and what actions they believe must be taken to manifest their hopes and address their concerns. These areas of thinking were framed in the context of the overarching research question of what it means to have a climate resilient community in San Fernando.

Following data coding and categorization, the four major interview themes that emerged were closely aligned to the interview questions, but with more focus on climate resilience actions and the strengths or barriers to carrying out those actions. These are shown in the table below (Table 1).

Table 1. Major interview themes and associated concepts.

Interview Theme	Examples of Interview Concepts to Support the Theme
San Fernando's Strengths	small scale and accessibility of the city, importance of community, connection with neighbors
Personal Actions for Climate Resilience	conserving water, choosing to walk, planting native plants
Community Actions for Climate Resilience	increasing access to green spaces, planting trees, educating residents about environmental issues
Barriers to Climate Resilience in San Fernando	household cost of solutions, disconnection from nature, resistance to change

We found that when asked about San Fernando's strengths, there was widespread consensus among participants that the small scale of the city is one of its greatest assets for reasons of safety, access to government and decision-makers, connection to neighbors and a strong sense of community (Figure 6).

On the other hand, when asked about barriers to climate resilience in San Fernando, participants had more varying opinions. Housing and transportation were frequent themes that emerged from this question. There was mostly consensus that housing density is a challenge as it leads to more parking and traffic congestion in the city; however, there was a recognition that there is a need for more affordable housing as realized through increased

housing density. The tension lies in whether more housing can or ought to be built before transportation infrastructure is improved enough so that members of the community will not have to solely rely on their vehicles.

Though there was consensus that the small size of San Fernando is an advantage, there were some participants who felt the city was accommodating to pedestrians, while others felt it is not walkable at all. For those that addressed mobility, there was general consensus that there is not enough biking infrastructure to really facilitate safe navigation by bike. Another common challenge of living in San Fernando that emerged among most participant answers were the high temperatures and its effects on both the landscapes (e.g., tree survival) and the lives of the participants. (All new concepts added by workshop participants, Appendix E).



Figure 6. San Fernando's strengths cited by participants. Font size indicates frequency, the largest words were mentioned by more participants, smaller by fewer.

Workshop Outcomes

Participants in the workshop were organized into groups that sorted and arranged concepts into new maps to represent their understanding of major themes outlined above (Table 1). They added new concepts and created original titles for each theme map. The process of sorting concepts from the interviews and proposing new concepts to the group inspired spirited conversation among participants. In one group, several participants debated the accuracy of “walkability” as a current strength in San Fernando.

While some reported enjoying living a walkable distance to downtown and a local park, others reported a sense of frustration with the pedestrian opportunities in town and expressed a desire for walkability to be improved in order to achieve a more climate-resilient community.

This discussion led to a compromise, the group settled on adding “potential for walkability” to the strengths map. They agreed this captured their collective agreement on the importance of walkability and the sentiment that the city infrastructure still needs improvements to facilitate pedestrian mobility and safety. Another participant passionately advocated for the inclusion of community gardens as a strength. Several group members disagreed citing that the does not currently have one, this discussion led to an agreement to include “potential for community gardens” as a strength, to reflect what this resident saw as a strong potential and need for a community garden as a step towards climate resilience.

The original map titles created at each station are shown in Table 2. The process of discussing and creating new titles as a group supported participants to further organize and define the themes identified through the individual interviews.

Table 2. Mental map titles created by participating groups at the workshop.

Workshop Station Theme	Titles of Resulting Maps Created at the Station
San Fernando’s Strengths	<ul style="list-style-type: none"> ● Community Strengths / Physical Strengths ● Small Bureaucracy / Community Resources
Personal Actions for Climate Resilience	<ul style="list-style-type: none"> ● Individual Actions / Government Actions ● Action Steps / Planting Wisely / Education & Communication
Community Actions for Climate Resilience	<ul style="list-style-type: none"> ● Leadership & Direction / Education / Trees / Infrastructure ● Education of students about the environment and climate change / Organized leadership/centralized efforts / Caring for San Fernando’s Trees (pre-existing theme, used as a title) ● Internal Community Actions / External Community Actions
Barriers to Climate Resilience in San Fernando	<ul style="list-style-type: none"> ● Barriers at the Individual Level / Physical Barriers / Community Barriers ● Social & Community Barriers / Leadership Barriers / (Weak) Communication ● Leadership Reactive vs. Proactive / Individuals Reactive vs. Proactive

One area that emerged as particularly relevant for this report was participants' desire for more support from and communication with local government. They appreciated that San Fernando is a small city where they have access to City leaders, yet they hoped for more communication and education, organized leadership, and financial support for residents to take concrete action for climate resilience. Several participants shared the sentiment that TreePeople plays an important role in bridging the gap between residents and government.

We want to highlight here the value of the collaborative mapping process as a community-engaged research approach that had co-benefits beyond the data it produced. Since we had already conducted individual interviews with participants, at the group workshop we were able to present and acknowledge shared values, community strengths and future concerns, which established common ground in the room at the outset. While there may have been disagreement among participants in certain areas, this shared understanding aided the researchers in facilitating open listening and constructive dialogue. Participants were presented with some of their own ideas in conversation with new ideas from their neighbors, yet all ideas were clustered together and presented anonymously and free of hierarchy or judgment. This minimized single view points, and facilitated group meaning making, and allowed for open dialogue across different perspectives.

The procedures for small groups rotating through the stations provided an opportunity for participants to engage with each other in a familiar and structured activity. The tactile cards for sorting, an engaged facilitator, dialogue prompts and timed intervals provided a container for dialogue and structure for collaboration. Collaborative mapping of concepts drawn from the interviews allowed individual's ideas to be reconsidered and negotiated by the group. Through dialogue and constructive debate, participants negotiated a collective understanding of strengths, barriers, and solutions for resilience as a community.

In post-workshop evaluations, community members shared their impressions of the process, and expressed a desire to continue engaging with their neighbors on these topics. Many expressed their appreciation for the opportunity to discover shared priorities, and came away realizing they are not alone in their concerns. Many expressed that they feel these types of community conversations are currently rare but key to building the future San Fernando they hope to see.

Participant reflections on their involvement in the project:

“It’s great to get together with fellow San Fernando residents who care about the future of the city regarding the climate/environmental issues. We need to get lots more residents to get involved in these types of workshops. It does make us feel empowered to express our thoughts.”

“This community we share has so many strengths and concerns in common! It is good to meet with people, with my neighbors from different backgrounds (education, careers, etc.) with similar hopes and concerns.”

“I learned that there’s a lot of people in my community that feel the same as I do. I appreciate that these conversations are being talked about because change is important.”



Synthesis and Opportunities

San Fernando, CA is a small city located within the borders of the City of Los Angeles, one of the world's largest cities. The city experiences extreme heat and average to low tree canopy cover. As a whole, San Fernando would be considered “disadvantaged” by both state (CalEnviroScreen) and federal (Climate and Environmental Justice Screening Tool) measures, and climate resilience ranked highly in a resident survey as a priority for urban forestry. To engage residents more deeply in dialogue about climate resilience, we carried out a series of individual interviews, mental mapping activities, and a group workshop in San Fernando. We found residents of this uniquely positioned city-community see a great number of strengths in the small scale and accessibility of San Fernando and the connections they have with neighbors, and generally have pride in their city. They also identified a number of barriers and necessary actions needed at both the individual and community scales for San Fernando to become more climate resilient. The following synthesizes our key findings by organizing them into possible opportunities that San Fernando might explore to achieve their climate resilience goals. While the suggestions below were developed directly from our work with San Fernando, they may also be relevant to other communities in California facing similar challenges.

Opportunity 1: Development of a Chief Community Liaison Role

San Fernando has the opportunity to create a position that bridges the gap between community and local government. A Chief Community Liaison could communicate about climate resilience-related resources and opportunities, provide a consistent point of contact for community members, and help residents navigate red tape in accessing those resources. This role would directly address the barriers community members identified to action and engagement: high perceived cost of household adaptation and mitigation measures, limited resident time and capacity to self educate about opportunities, challenges accessing resources and information. Resident hopes and concerns for climate resilience cut across issues including housing, transportation infrastructure, alternative energy, waste management, management of the urban forest and green spaces, education and communication. This role could speak across these issue areas, how they intersect and impact climate resilience. This role would also facilitate opportunities for ongoing community dialogue and engagement, and support accessibility and frequency of climate-resilience related communications.

New York City recently created a similar role with the appointment of Betsy Maclean as the first Chief Engagement Officer, a role designed to “systematically learn from communities to inform policy and programs, and advance community-driven solutions” (NYC Mayor’s Office, NYC Green Book). We believe there is even greater appeal for the establishment of this role in a “city-community” like San Fernando to enhance opportunities for engaged community-scale municipal decision making and planning. Strong resident interest in a more active feedback loop with local decision-makers suggest a dedicated liaison would provide a welcome avenue for frequent two-way communication with local government.



Opportunity 2: Create More Opportunities for Community Dialogue and Peer Education

Residents identified more frequent dialogue between community and local leadership as a key aspect of local climate resilience. They asked for more opportunities to discuss environmental issues and strategies with their neighbors, and increased two-way communication and educational materials. The establishment of a Chief Community Liaison could certainly support, but is not required, to carry out this type of outreach.

One suggestion in this area is a climate resilience focused peer education program, which would facilitate opportunities to encourage community dialogue and co-learning. Residents expressed a desire for more conversations with neighbors, and more engagement from the broader community on environmental topics. They highlighted resistance to change as a key barrier to climate resilience, and raised the prospect of more dialogue and conversations with neighbors as a potential anecdote to that resistance. This may look similar to the tree ambassador framework, expanding beyond urban forestry to address community climate resilience more holistically.

Another suggestion is a city-supported formation of a community advisory board on climate resilience. This could harness the knowledge and enthusiasm residents have about achieving climate resilience in their city, and would promote the development of resident leaders who could represent their neighbors and community members to city government on issues related to climate resilience.

Los Angeles County recently established a similar initiative with the Youth Climate Commission, coordinated by the Chief Sustainability Office. The commission is made up of 25 young adults from across the county, and is tasked with “making recommendations, providing ideas and advice to the Board of Supervisors on the County’s climate-related goals, plans, actions, policies and initiatives” (County of Los Angeles Board of Supervisors, Youth Climate Commission). Establishing a similar community advisory board of San Fernando residents across a broad age spectrum would establish a trusted avenue for resident feedback on climate-related issues, while also providing leadership opportunities for community members who seek pathways for stronger communication with their local government.



Opportunity 3: Engagement and Communication Strategies Guided by Residents

Our findings can help provide some guidance to San Fernando in effectively communicating and engaging with residents around climate resilience.

First, outreach campaigns and materials can highlight how climate-resilience initiatives reinforce and preserve the unique aspects of San Fernando that residents value, and directly address commonly held concerns for the future. The most frequently expressed concerns among participating residents included: exposure to extreme heat; the need for shade & cooling strategies; concern for younger generations; the desire to transition to clean energy with financial and logistic support; community safety; and appreciation and conservation of water. One example might be a campaign designed around an intergenerational family narrative, tapping into the commonly expressed sentiment among participants that environmental stewardship is a thread that connects them to their elders and implies responsibility for future generations of children.

Second, outreach campaigns and materials can emphasize how climate resilience goals and strategies are linked to the issues residents' deal with on a day-to-day basis: cost of living, housing, transportation, community safety, education and employment opportunities. Designing materials that demonstrate the link between common household challenges and community climate resilience strategies reinforces their relevance and invites dialogue on constructive solutions that can have a positive impact on residents' lives now and into the future. Frequent, celebratory communication of the impacts of current and recently completed local projects is another important piece of building momentum and public connection to climate resilience efforts. Many participants expressed a desire to know more about projects and strategies already underway in their town, how they would impact their lives, and how they could get involved.

Third, local government, concerned residents, local businesses, community-based organizations and others working toward greater climate resilience in San Fernando can increase their impact by collaborating with residents on an ongoing basis to identify and address barriers to engagement and participation. The complex and dynamic nature of the climate-resilience related challenges identified suggest that strategies to support resident participation need to be sustained over time, tailored to specific needs, and responsive to evolving challenges experienced by residents. Some of the key barriers to participation identified by participants include: limited time to self-educate and engage politically; limited resources to identify and finance household resilience measures; a desire for more information and education opportunities about local environmental challenges and solutions; and a desire to learn how to get involved.

In response to residents' request for positive, actionable resources, the project team created a Local Climate Resilience Resource Menu for San Fernando. The menu organizes locally relevant resources around core concerns identified by participants, and is geared towards alleviating the resident-identified burdens of limited time, information and resources to learn about and take part in local opportunities to take action. The Menu also provides as an example of a tailored, community-informed local resource and the first iteration of a living community-driven guide for building local climate resilience in San Fernando (Appendix F).

Next Steps

While this report marks the completion of this study in San Fernando, our team will continue to share research findings with community members, City Staff, and organizations doing similar work. Frequent community events, such as the Outdoor Holiday Market in December, 2023 (Figure 7) provide opportunities to share findings and engage more residents in conversations about building climate resilience. These events include those led by TreePeople, such as community volunteer tree plantings, fruit and shade tree distributions, and workshops, which will take place in 2024 and beyond. We intend to share findings directly with City of San Fernando staff in a presentation at a future City Council meeting. Finally, we will pursue opportunities to coordinate and partner with other organizations doing related work in San Fernando. As an example, the research team recently met with KDI, a community-driven development and design firm writing a Park Opportunity Plan for the City of San Fernando to share findings from this project.



Figure 7. TreePeople tabled at a popular outdoor holiday market in December, 2023 to share the findings, disseminate the community-informed Local Climate Resilience Resource Menu, and discuss residents' impressions and ideas for climate resilience.

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Appendix

- A. Outreach Postcard
- B. Interview Guide
- C. Individual Concept Maps
- D. Workshop Maps
- E. New concepts added in workshop stations
(next page)
- F. Local Climate Resilience Resource Menu
- G. Outreach Poster created for events
to share results and invite continued
community dialogue

Appendix E. *New Concepts added in workshop stations*

Workshop Station Theme	Titles of Resulting Maps Created at the Station
San Fernando’s Strengths	<ul style="list-style-type: none"> ● Outdoor markets ● City flyers delivered door to door ● Access to trolley ● City promotes resources to support climate change ● Quick police response ● Potential for community gardens ● Sense of responsibility for water conservation (education surrounding) ● TreePeople ● Potential for walkability
Personal Actions for Climate Resilience	<ul style="list-style-type: none"> ● Transit → carpooling ● Local govt. support for residential action ● Compost → green bins ● Solar panels (finance?) ● Education options ● Being an example for others on our neighborhood to follow (clean yard, organized, solar panels) healthy appearance ● Barrer las calles - si todavía no va a venir la barredera ● Spreading awareness on social media ● Clearly provide and mark recycling containers in all public buildings ● Took out grass & put compost ● Replaced regular plants with drought tolerant plants ● Choosing to visit native plants more locally ● Ecotourism on a smaller, more local/sustainable scale (driving to visit plants vs. walking/biking) ● Taking classes on cultivating drought tolerant/water friendly plants ● Community gardens ● Add sun exposure into the building codes - porches, trees, etc. ● Spreading awareness on social media ● Encourage friends, family, & people in your community (neighbors) to share what they learn & do for the local environment ● Being an example for others on our neighborhood to follow (clean yard, organized, solar panels) healthy appearance

Workshop Station Theme	Titles of Resulting Maps Created at the Station
Community Actions for Climate Resilience	<ul style="list-style-type: none"> • Organized leadership/centralized efforts • More financial support for residences to make changes to support climate • Education of students about the environment and climate change • Emphasis on maintenance of sustainability efforts → leadership & communication & education • Backyard trees • Water conservation • Investigating how to promote education • Community-based organizing, info sharing • Water refill stations (public) • Investigating how to promote education • Community-based organizing, info sharing • Low-water usage misters in parks to motivate families to go to parks
Barriers to Climate Resilience in San Fernando	<ul style="list-style-type: none"> • Invitaciones de la ciudad para participar (ex: Donar árboles que ya están sembrados) • Not discussed enough in education spaces • Don't depend on others to help with environment, we must do our part • No hay suficiente información de la ciudad a los residentes • Municipal backing of needed actions (i.e. being on board across city departments) • Need for connection to area (land, people, flora, fauna) in its entirety (holistically) [lack of local experience/understanding of local perspective] • ADU - add traffic - pollution - use resources and parking • A lack of focus by City Planning on environment • Need for more effective (and also more quantitative) communication about issues, efforts + community involvement • Missing incentives • Education and resident empowerment • Communication can be hit or miss • Reliance on personal vehicles (cars) • Financial resilience • “Tunnel vision”



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