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## **Wicked Problems: Understanding How Cities and Counties in California are Tackling Climate Change and Homelessness**

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WICKED PROBLEMS: UNDERSTANDING HOW CITIES AND COUNTIES IN  
CALIFORNIA ARE TACKLING CLIMATE CHANGE AND HOMELESSNESS

A Thesis Proposal

Presented to

The Faculty of the Department of Environmental Studies

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Guadalupe Franco

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WICKED PROBLEMS: UNDERSTANDING HOW CITIES AND COUNTIES IN  
CALIFORNIA ARE TACKLING CLIMATE CHANGE AND HOMELESSNESS

by

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APPROVED FOR THE DEPARTMENT OF ENVIRONMENTAL STUDIES

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## ABSTRACT

### WICKED PROBLEMS: UNDERSTANDING HOW CITIES AND COUNTIES IN CALIFORNIA ARE TACKLING CLIMATE CHANGE AND HOMELESSNESS

by Guadalupe Franco

California continues to endure the detrimental effects of climate change, such as poor air quality, flooding, and heatwaves. Concurrently, the state has seen an increase in the number of unhoused communities due to various ramifications such as rapid urbanization, failed political leadership, and restricted housing policies. While unhoused communities fight to access basic services, they must also now adapt to the looming impacts of climate change. Unhoused populations are especially vulnerable to climate change as they have limited access to shelter, spend the majority of their time outdoors, and lack the economic ability to adapt. While cities and counties are developing climate action plans, it is important to understand to what extent they consider the most vulnerable communities such as the houseless. Through the analysis of 15 climate action plans, and 14 semi-structured interviews from 11 jurisdictions, research findings highlight: (1) the procedural injustice of unhoused communities' right to engage in decision-making spaces, and (2) the inequitable planning for a Just City by overlooking the experiences of unhoused populations. This work identifies best practices that city and county governments can adopt to produce more equitable climate action plans that consider the most vulnerable, such as the houseless.

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This research is in solidarity with the thousands of unhoused individuals around the world, and those who are continually silenced and oppressed by abusive systems of power.

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## 1. Introduction

The state of California is vulnerable to the impacts of climate change and will continue to experience worsening effects in the upcoming years. California also has one of the largest unhoused populations in the country. As the state continues to experience the impacts of climate change, cities and counties have addressed this challenge by creating climate action plans (CAP). This research aims to understand the extent to which cities and counties in California are addressing these problems by utilizing an environmental justice, urban political ecology, and urban sustainable planning lens. This research answers the following questions: (1) Do cities and counties in California recognize unhoused individuals as stakeholders in climate planning? (2) Have local governments engaged with houseless populations in their climate planning efforts? (3) What are some successes and best practices, as well as challenges and limitations, faced by jurisdictions attempting to integrate equity in their climate strategies?

Climate change and houselessness have been categorized as “wicked problems,” a term theorized by Rittel & Webber (1973) to understand the social or cultural problems that seem impossible to solve due to their interconnected nature (Kolko, 2012). For example, climate change is ‘wicked’ because the emissions of a product might come from a place in which it is manufactured, but it is then consumed by people in a completely different place. The drivers of climate change are globally interconnected and so are our patterns of consumption. This circularity means that solving climate change is impossible and thus a wicked problem. Similarly, issues of poverty are linked with education, nutrition, economy, and so on which is why these two issues are characterized in this way.

Threats of climate change are dangerous to California’s staggering population of 39 million, despite its \$3.1 trillion economy (Forbes, 2019; U.S. Census Bureau, 2019). For example, during the 2020 fire season, over 10,000 structures were destroyed which cost over \$12 billion in damages (CalFire, 2020; Louie, 2020). As natural disasters and extreme events increase in frequency and intensity due to climate change, the health and well-being of communities will also be threatened (Cusack et al., 2013; Ramin & Svoboda, 2009). Threats to populations include “heat-related illnesses, breathing and heart troubles, food and water contamination, traumatic injuries, mental health challenges, and exposure to infectious diseases” (Constible et al., 2019, p. 1). This can cause greater dangers to low-income communities, who in times of extreme weather such as high temperatures, can suffer from heat exhaustion due to excessive outdoor exposure and lack of access to water (Anderson & Bell 2011; Corburn 2009; Knowlton et al., 2009). Threats of climate change will continue to affect communities, especially those that have pre-existing challenges that impede their ability to adapt.

The U.S. HHS (2016) defines a “homeless” individual as simply someone that lacks housing and resides in a location not meant for human habitation. Although academics and media continue to use the term “homeless” to describe this population, activists and journalists have pushed back against the stigma of this word (Hulchanski et al., 2009). To restore the dignity of the population, activists have phased out this “slur” by switching to alternatives such as ‘houseless’ (Goodling, 2019), ‘unhoused’ (Orenstein, 2020), ‘unsheltered’ (Walker, 2020), ‘urban camper’ (Orenstein, 2020), and ‘curbside communities’ (Miralle, 2019; Snider, 2020). To be in solidarity with this population, the rest of this research article will also use these alternative terms.

California has over 150 thousand people experiencing houselessness, of that 68% are considered unsheltered (HUD, 2019). Unsheltered populations often reside in makeshift beds on sidewalks, cars, abandoned buildings, tents, parks, creek and riverbeds, etc. (HUD, 2019; Geha, 2016). The state has been the focal point of the houseless crisis, prompting the United Nations Special Rapporteur to the Right to Adequate Housing (2018) to say that the manner in which California has tackled houselessness was “dehumanizing, demoralizing, and unjust” (Gee, 2018). On a visit to California in 2019, then President Trump called the houseless crisis “disgusting,” excoriating Gov. Gavin Newsom and local leadership (Levin & Botts, 2020; Whalen, 2020). There continue to be many efforts put forth by the state of California to end houselessness, but it has proven to not be sufficient. For example, in 2018 then Gov. Jerry Brown directed “\$500 million to emergency houselessness funding in response to a plea for help from mayors of the state’s 11 largest cities” (Levin & Botts, 2020, p. 22). In 2019, Gov. Gavin Newsom designated \$1 billion into combating houselessness and another \$1.4 billion in 2020 (Levin & Botts, 2020; Whalen, 2020). Despite these efforts, the number of unhoused individuals increased by 16.4% from 2018-2019, and there was a 21.1% increase of unsheltered individuals (Frost, 2020). Despite the outrage from the former president, there was no action taken to try to help California.

In addition to the large budget set to tackle houselessness, jurisdictions continue to fund and enforce exclusionary policing which leads to the criminalization of unhoused groups over basic activities like eating and sleeping in public spaces (Amster, 2003; Goodling, 2019; Pospěch, 2020). For example, in their 2020-2021 budget, the City of Los Angeles set aside \$30,859,528 for various encampment sweep-related costs (City

Administrator Office, 2020). The prioritization of the City of Los Angeles to fund strategies that cause further displacement and trauma to this population poses an even greater challenge to their climate vulnerability and adaptive capacity. Not only are unhoused populations unwilling to turn to their City for help during a climate disaster, but now they must worry about being removed from seeking safety and shelter.

In areas like Los Angeles County, houselessness has increased by 17% since 2018, with nearly 5,000 people living in Skid Row, an area that is stretched only a half square mile around East of Downtown Los Angeles (Levin & Botts, 2020). The area continuously grew out of control due to years of failed policy, strict code enforcement, and deteriorating housing which left many people outdoors sleeping on curbsides (SRHT, 2020). This area is a well-known hotspot because it is where most resources are distributed to houseless individuals (SRHT, 2020). Although services such as food, clothes, and water are regularly distributed, groups tend to not utilize these resources due to a fear of losing their belongings (Levin, 2019). Resources for this population tend to be allocated to those considered ‘chronically homeless,’ which is characterized by people with disabilities who have spent extended time without consistent shelter. However, Levin & Botts (2020) point out that 26% (roughly 34,000 people) of unhoused Californians fit into this ‘chronically homeless’ category, which creates an even larger pool of individuals that require shelter and other forms of assistance.

The challenges of climate change are embodied by people experiencing houselessness as they carry out the majority of their days outdoors for extended periods of time. The time spent outdoors increases their vulnerability to extreme weather which can lead to heat exhaustion, dehydration, hypothermia, and respiratory disease (Anderson & Bell,

2011; Corburn, 2009; Knowlton et al., 2009). The state is already experiencing the repercussions of a lack of action, as counties like Los Angeles have had 28 people die since 2016 of hypothermia (Levin, 2019), and at least three people died during a heatwave in 2019 (Griggs, 2020). These deaths do not account for the number of individuals who have passed away due to other conflicting reasons.

Given the urgency of these two threats, this research seeks to understand if jurisdictions in California consider unhoused communities while developing climate strategies. The goal is not to criticize jurisdictions, but to understand their progress and identify the gaps in their plan development. At the end of this article, recommendations will be shared to help inform city and county climate efforts, so they can better center equity that considers unhoused communities in their strategies.

## 2. Literature Review

### 2.1 Environmental and Climate Justice

In the U.S., the increasing awareness of the disproportionate environmental risks placed on poor communities of color was the genesis of the environmental justice movement (Bullard, 2007; Cole & Foster, 2001; Kaswan, 2008; Taylor, 2002). While pollution affects everyone, the environmental justice movement asserts that it is the poor and/or people of color who are overburdened with the disproportionate number of facilities that fill the air, soil, and water with contaminants affecting their health and well-being (Bullard, 2007; Cole & Foster, 2001; Taylor, 2002). The paradigm of the environmental justice movement helped academics, NGOs, and activists conceptualize the climate justice social movement. The climate justice movement reshaped the mainstream environmental movement and adopted concepts from the environmental justice movement to recognize the disproportionate impacts that climate change plays across social, economic, and racial groups (Klein & Riemer, 2011; Rampini, 2017; Schlosberg & Collins, 2014).

Two of the most prominent contributions out of the environmental justice movement were the retheorizing of the traditional concepts of what an ‘environment’ and what ‘justice’ is. In the traditional environmental movement, the word ‘environment’ was used to refer to wilderness or nature, but activists and academics challenged this idea and broadened it to include where people ‘live, work, and play’ (Novotny, 2000; Schlosberg & Collins, 2014).

The idea of ‘justice’ and what it constitutes is constantly being reworked with respect to spaces where people reside, which is most often cities (Steele et al., 2012). Activists

and academics broadened the definition of ‘justice,’ which was previously framed as ‘rights’ and ‘responsibilities,’ to address distributive justice, and procedural justice (Perry & Atherton, 2017). This research is focused on procedural justice, which is the restructuring of economic and environmental decision-making procedures to offer the opportunity for community members to participate in decision-making processes that affect their lives (Bulkeley et al., 2014; Lake, 1996; Prado, 2019). While the environmental justice field has established a framework for justice, there is still a gap in recognizing the most affected communities and allowing them to have a “place at the table” (Schlosberg, 2003, p. 84).

Even though the environmental justice field has been centered on urban spaces that are predominantly inhabited by Black, Indigenous, and People of Color (BIPOC) communities, it continues to have a significant blind spot where it has left out unhoused populations (Gibson, 2019; Goodling, 2019; Klein & Riemer, 2011). Based on the framework created by the environmental justice movement which emphasizes class, individuals experiencing homelessness are the most disadvantaged communities in the discourse, but they are the least mentioned (Gibson, 2019; Goodling, 2019; Klein & Riemer, 2011; Koprowska et al., 2020; Mitchell, 2003). Only recently are more academics researching this synergy, such as Gibson (2019) who focused on disaster response and planning to best support unhoused individuals, and Goodling (2019), who drew from a black feminist lens to create a critical environmental justice analysis on systemic violence and environmental hazards. Additional work has studied the accessibility to urban green spaces by unhoused populations (Koprowska et al., 2020).



Through an environmental justice lens, this research contributes to the field by expanding the spaces to be inclusive of the city. Using a procedural justice approach to inclusive participation, unhoused individuals have been understood as the most vulnerable to climate change. Furthermore, as the most vulnerable population, unhoused individuals should receive the right to participate in the development of equitable climate strategies. This research will contribute to this growing literature by restructuring the idea of an environment to include the urban spaces and give urban inhabitants the right to participate in decisions that will affect their lives.

## **2.2 Urban Political Ecology and Just Cities**

‘Such wealth! Such poverty!’ exclaimed urban political ecologist Henri Lefebvre while on a visit to Southern California, signaling a time when urbanization became the new norm and the economic juxtaposition was visible (Lefebvre, 1996, as cited in Tzaninis et al., 2020). Branched from the traditional field of political ecology, urban political ecology studies the synergy between social, political, economic, and ecological processes that create inequitable landscapes in urban spaces, this includes but is not always exclusive to cities (Angelo & Wachsmuth, 2015; Heynen, 2014; Swyngedouw & Heynen, 2003; Zimmer, 2010). Urban political ecologist and environmental justice scholars have uncovered the inequalities and processes that are unevenly distributed across the city (Bulkeley et al., 2014). Despite studies of urban political ecology being focused on issues relating to inequality in urban areas, the field has been notably silent on issues of houselessness (Goldfischer, 2020).

Unhoused populations in public spaces are visual representations of inequality and poverty that disrupt the ideologies of a ‘just city’. The idea of a “Just City” was coined by

Fainstein (2010) and represents a planning ideology of a city that addresses greater social justice to encompass equity, democracy, and diversity. In other words, a just city is an environmental model in which race, class, and gender does not determine or impede one's access to equity and security in their communities (Moore, 2015). The demand from environmental justice and urban political ecologist scholars to seek justice for marginalized individuals and groups, is met with the idea of reclaiming their rights and shifting from discussions of a 'just city' to the 'right to the city' (Marcuse et al., 2011; Perry & Atherton, 2017).

Researchers Langegger & Koester (2016) explored Lefebvre's (1996) idea of the "right to the city" by studying the impacts of anonymity on curbside communities, and the disarray of being visible to the public due to camping bans. The right to the city is a form of social justice that includes not only the right to anonymity but also the right to rest, and the right to health (Lefebvre, 1996, as cited in Langegger & Koester, 2016). Arguably unhoused, specifically, unsheltered populations are the most vulnerable to the impacts of climate change, as they are less able to access safe spaces during extreme weather events, and consequently are targets due to their visibility (Rose, 2019). As climate change continues to widen the gap between the affluent and marginalized, it is the economically disadvantaged populations who lack capacity to adapt (Amster, 2003). In a study conducted by Bonds & Martin (2016), the researchers noted that houseless individuals are viewed as a type of environmental contaminant that should be 'cleaned up' or 'kept out.' Through this notion, Schrock et al., (2015) adds that activism such as the not in my back yard (NIMBY) movement, city laws, and law enforcement all target and exclude unhoused communities from accessing public spaces and resources. Cities are

criminalizing individuals under ‘green’ pretenses by imposing restrictions and exclusions on public resources, which challenges the ability of individuals to access clean drinking water, housing, and to exist in public spaces (Amster, 2003).

By denying these individuals the freedom to carry out their lives within the urban environment and creating the oppressive structures that challenge their ability to carry their lives in public, is a form of injustice (Bonds & Martin, 2016). This research will contribute to the urban political ecology and just cities literature by expanding the ideology of the right to the city to include curbside communities and their inherit right to exist and participate in the planning of a just city. Additionally, the recommendations from this article will help planners understand their role as advocates for a just city.

### **2.3 Planning for Sustainable and Resilient Cities**

In order to create sustainable and resilient cities for generations to come, sustainable urban development requires an overlap of environmental stewardship, economic prosperity, and social justice (Holdren, 2008; Wheeler, 2004). In practice, this means that urban sustainable development should include an overlap of land use, transportation, housing, community development, economic development, and environmental planning, not just the physical creation of the city (Meda, 2009). Resilience has no true definition in practice, but Meerow et al., (2019) adds that it describes cities accepting that change and disruption are inevitable, so they focus on enhancing the ability of institutions, built environment, and communities to cope and adapt.

Even though sustainable and resilient cities should meet the criteria of economic growth, social justice, and environmental stewardship, often social justice is not prioritized (Agyeman & Evans, 2003). Social justice is the equitable distribution of

resources to meet people's needs, allowing them to achieve their full potential and feel psychologically and physically safe, and secure in the societies in which they live (Bell, 2013 as cited in Adams et al. 2000; Russell, 2015; Turiel et al., 2016). Instead, sustainable strategies that are created adhere to, “green buildings and housing, mixed-use developments, walkability, greenways and open spaces, alternative energy sources such as solar and wind, and transportation options” (UTA, 2018). While these strategies tackle the economic and environmental interests of sustainability, they are often created to reinforce existing agendas and power relations while neglecting social equity and justice concerns (Schrock et al., 2015).

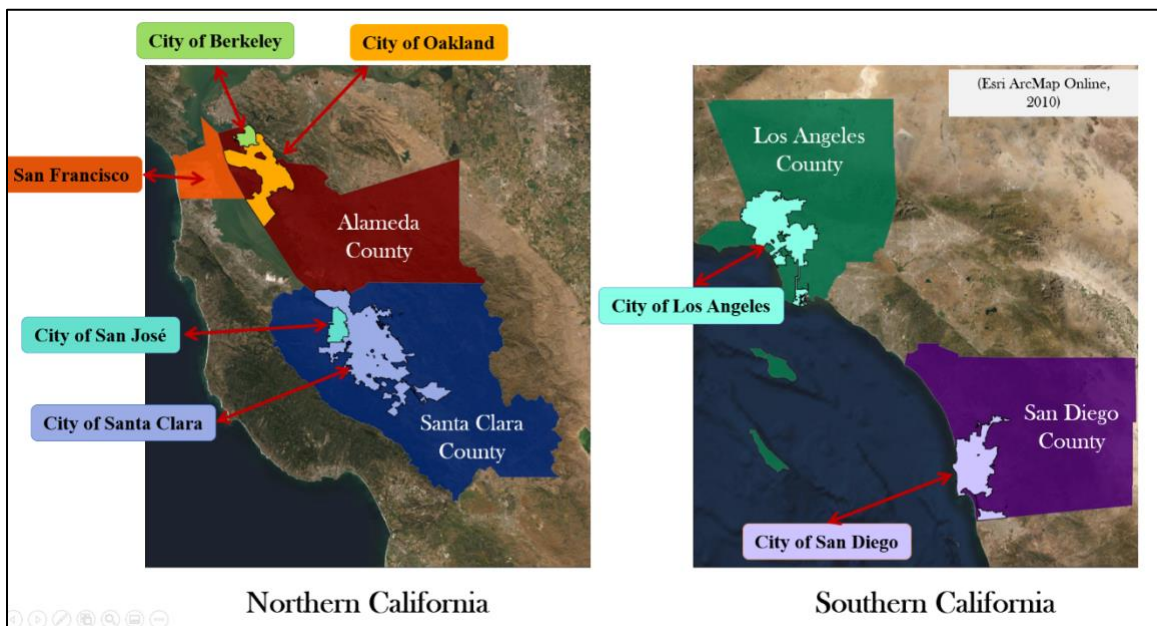
Urban planners tend to have a “poor record” of achieving a synergy of equity and justice (Steele et al., 2012; Winkler, 2009). Furthermore, Steele et al., (2012) adds that urban policies and practices have often been complicit of the conditions of poverty, houselessness, access to basic services, and ecological integrity due to political agenda that prioritizes making cities more attractive (Eisenschitz, 2008; Reece, 2018; Schrock et al., 2015). When planning sustainable and resilient cities for populations experiencing houselessness, the main approach on behalf of jurisdictions is often affordable housing strategies, but the horizontal inequities that lead to exclusion of this group is rarely acknowledged (Equity for the Children, 2013). This research will contribute to the field of urban sustainability planning by identifying the inequities present in planning efforts with respect to unhoused populations. Through this perspective, this research advances the empirical demand for more sustainable and resilient cities by prioritizing marginalized communities, inclusive spaces, and social justice.

### 3. Study Site

This research is focused on the state of California, particularly on four counties (Santa Clara County, Alameda County, Los Angeles County, and San Diego County), and seven cities (San José, Santa Clara, Oakland, Berkeley, Los Angeles, San Diego, and San Francisco), as presented in Figure 1. This research focuses on California because it has the country's largest unhoused population.

**Figure 1**

*Study Site of Seven Cities and Four Counties in California*



#### 3.1 Houselessness in California

California is the wealthiest state in the United States (Forbes, 2019), yet it also has the highest unhoused population in the country, accounting for 27% of the homeless population (HUD, 2019; USICH, 2019). There are several factors to explain California's staggering houseless population but largely it is attributed to economic dislocation, reduced social safety nets, failed housing policy, mass incarceration, family instability,

structural racism, and individual cases (Herring, 2014; Lozano, 2020; Turner, 2017). Although states like New York and Hawaii have the largest unhoused population per capita, California has 71.7% of the country's unsheltered population, which is the highest percentage of people living in encampments, under bridges, freeways, rivers, cars, and other public spaces, as presented in Table 1 (Batko et al., 2020; HUD, 2019; Levin & Botts, 2020). The unhoused population in California is largely made up of 32% Latinx, 30% Black/African Americans, 4% American Indian/Alaska Native, and 2% Asian populations (Levin & Bott, 2020). Further demographic analysis shows that nearly 8,000 families and 14,000 children are included in this population, as well as 8% of the total population are military veterans. (Levin & Bott, 2020). Moreover, while local studies indicate that the majority of the unhoused population are locals, it is unclear what percentage of the unhoused population is undocumented. For example, in San Francisco, around 70% of curbside communities were relocated from adjacent regions, 22% from other parts of the state, and only 8% from beyond the state (Levin & Botts, 2020).

**Table 1***Total Houseless Population in the United States as of 2019*

<b>Region</b>	<b>Houseless in 2019</b>			<b>Population</b>
	<b>Total</b>	<b>Unsheltered</b>	<b>Sheltered</b>	
<b>Los Angeles County</b>	56,257	42,471	13,786	10,039,107
<b>Santa Clara County</b>	9,706	7,922	1,784	1,927,852
<b>Alameda County</b>	8,022	6,312	1,710	1,671,329
<b>San Francisco</b>	8,035	5,180	2,855	881,549
<b>San Diego County</b>	8,102	4,476	3,626	3,338,330
<b>California</b>	151,278	108,432	42,846	39,512,225
<b>United States</b>	567,715	211,293	356,422	328,239,523

*Note.* Data retrieved from the U.S. Census Bureau, (2019) and U.S. Department of Housing and Urban Development, (2019).

### **3.2 Climate Change in California**

Despite its booming economy, California is not exempt to the impending threats of climate change. The top threats to California include increased extreme heat, flooding due to sea level rise and precipitation events, increased air pollution from wildfires, and heatwaves (California’s Fourth Climate Change Assessment, 2018). In coastal San Francisco, temperatures have warmed by 33.4°F since 1850-2017, and are projected to

warm between 34.2°F – 39°F by 2100 (Carbon Brief, 2018). In Southern California, the County of San Diego has warmed by 34°F since 1850-2017, and is expected to experience an increase between 34.3°F – 40°F by 2100 (Carbon Brief, 2018). Comparatively, the inland city of San José has significantly warmed by 34.5°F since 1850-2017, and is projected to warm between 34.9°F – 40.3°C by 2100. Inland areas such as Santa Clara County are expected to reach higher temperatures than the northern coastal regions due to their distance to the coastal winds that are experienced up north (SPUR, 2011). In Southern California, the 2020 wildfire season brought Los Angeles County 121°F days (Schwartz, 2020). Cities prone to experience the worst air pollution are Los Angeles, San Diego, San José, and San Francisco as they are located near coastal mountain ranges which send sea breezes that trap pollution in these areas (Sharip. 2017).

The impacts of climate change affecting California that are most concerning with respect to the large unhoused population are heat waves, air pollution, and flooding (Baker, 2012; Berisha et al., 2017). Unhoused communities, such as those living along Skid Row in downtown Los Angeles, are vulnerable to rising temperatures caused by the urban heat island effect which are expected to triple in frequency reaching over 95°F days by 2050 (Chiland, 2019). Extreme precipitation events and flash floods will increase the water volume in creeks and rivers which will increase runoff and contribute to sewer buildup, threatening the safety of unhoused populations that reside by these locations (SPUR, 2011). As presented, the impacts of climate change pose serious threats to the lives of curbside communities and is a crisis that must be addressed by city and county leaders.



Most often at a local level, cities and counties are tasked with planning for climate change due to their power over urban development, economic activity, transportation infrastructure, and energy use (Boswell et al., 2019; Mendez, 2015). To address this issue, cities and counties have developed CAPs, which are planning documents that outline greenhouse gas (GHG) emission reduction targets and strategies, and act as policy and guiding documents for decision makers (Koski & Siulagi, 2016). Efforts to reduce GHG emissions include strategies such as investment in renewable energy, electrified buildings, and alternate transportation modes, with the goal of creating low-carbon and resilient and just cities (Boswell et al., 2019; Koski & Siulagi, 2016; Schrock et al., 2015). Additionally, cities and counties often create other plans such as sustainability action plans (SAP), and climate adaptation plans, which are broader than CAPs, and include environmental, social, and economic considerations (CSC, 2014).

## **4. Methods**

This study examines how and to what extent cities and counties are incorporating unhoused populations and social equity into their CAPs. Data collected to achieve this objective included (1) content analysis of 15 plans created by cities and counties in California, and (2) interviews with city and county planners who worked on the published plans, or the plans that are currently under development or update.

### **4.1 Content Analysis of Plans**

This study focused on the top five continuums of care (CoC) in California with the biggest unsheltered population. A CoC is a regional or local planning body that coordinates housing and funding programs for unhoused populations (NAEH, 2016). The annual point-in-time reports created per CoC detail the count of houseless populations. These reports were collected from the U.S. Department of Housing and Community Planning (2019) website. In addition to the five CoCs, the principal cities and counties of the planning districts were also chosen. Plans were collected through their respective public websites, and updated drafts of the plans were acquired through email exchange with the jurisdictions. A total of 15 plans were collected, with 10 of them being climate action plans and five being sustainability plans. Two reviewers, the principal investigator (PI) and an undergraduate research intern, reviewed and analyzed the plans.

Content analysis is a methodology that produces replicable datasets of recorded and public information and is used to assess the absence or presence of criteria previously determined by the researcher (Lyles & Stevens, 2014; Putt & Springer 1989; Krippendorff, 2004). For this research, a content analysis of plans was done using a preliminary scorecard that was adapted from concepts and categories found in the

following studies (Alexander, 2020; Angelo et al, 2020; Leavitt, 2014; Mendez, 2015; Schlosberg, 2012; Schrock et al., 2015). These studies generally measured CAP quality by examining equity language, the co-benefits of policies to historically disadvantaged groups, and assessed the extent to which the policies in the CAPs have been implemented at the city and state level. This is the first study that has analyzed if (1) through stakeholder engagement, cities and counties have acknowledged unhoused populations as a stakeholder, and (2) if cities and counties have created goals and strategies that will have direct benefits to unhoused populations.

This method of content analysis is adopted by researchers largely due to its accessibility, as documents can be found through public domains and no expensive equipment is needed (Lyles & Stevens, 2014). Limitations to content analysis include objectivity, and reliability if the collection of documents is incomplete (Kolbe & Burnett, 1991; Lyles & Stevens, 2014; Mendez, 2015; Yin, 2003). To supplement and address this limitation, semi-structured interviews were performed. Additionally, relevant grey literature, websites, staff report, and news articles were reviewed to confirm information gathered in the plan evaluation protocol.

## **4.2 Scorecard Development and Implementation**

A scorecard was developed to evaluate the content gathered from the plans, as presented in Table 2. After reviewing academic literature, a preliminary scorecard was created and pre-tested on plans that were not included in the study (Bernard, 2011; Lyles & Stevens, 2014), which led to several revision cycles. Scorecards have been used in planning studies to assess the quality of plans, and their impacts to the broader improvement or demise of society (Berke et al., 2019; Tang et al., 2010). Studies that

have used scorecards to evaluate plans have been done by converting text to a quantitative measurement. For example, a resilience scorecard was created by Berke et al. (2015) that assessed whether local plans target areas that are most prone to hazards. Other studies have created scorecards to determine the prominence and specificity of equity themes (Schrock et al., 2015); public health co-benefits in goals outlined (Mendez, 2015); and to assess the overall quality of plans to reduce GHG emissions (Baer, 1997; Berke & Godschalk, 2009; Brody, 2003; Deetjen et al., 2018; Tang et al., 2008).

Unlike previous research, the scorecard in this study was designed to analyze the existence or absence of concerns related to houselessness in local plans. To adhere to the specificity, the plans were given a score of zero to one with increments of 0.25 points. The plans were scored independently by the PI and research assistant after multiple adjustments to the scorecard. To ensure inter-rater reliability, the scores were discussed and tested using Krippendorff alpha score to ensure that they meet generally accepted standards of 0.80 or greater (Krippendorff, 2004; Stevens et al., 2014; Woodruff et al., 2018).

**Table 2**

*Evaluation Scorecard Used to Analyze 15 Plans*

<b>Evaluation Scorecard</b>		
<b>Category</b>	<b>Description &amp; Examples</b>	<b>Score</b>
Stakeholder Representation	<p>Describes the recognition of unhoused individuals/organizations as a vulnerable community and their exposure to the climate crisis</p> <p><i>Unhoused populations are among the most vulnerable San Franciscans. Without stable shelter options, this population is often more exposed to hazard events (San Francisco Hazard and Climate Mitigation Plan, 2020).</i></p>	<p>0 = no recognition of vulnerable communities</p> <p>0.25 = recognize vulnerable communities</p> <p>0.50 = recognize unhoused as a vulnerable community</p> <p>0.75 = recognize unhoused as a <b>climate</b> vulnerable community</p> <p>1 = recognize the need to protect this population from climate change</p>
Stakeholder Engagement	<p>Describes if and how jurisdictions involved unhoused individuals/organizations in the preparation of the plan</p> <p><b><i>Pop-Up Engagement and Climate Equity Workdays:</i></b> <i>Led by the EF, this work involved meeting people where they are and through hands-on projects that make climate action tangible and relevant. These included presentations to neighborhood and church groups, and projects such as tree planting, building tiny homes for unsheltered Oaklanders, and coastal cleanup. These events helped spread the word about the ECAP and encourage participants to join workshops or access other engagements (Oakland ECAP, 2020).</i></p>	<p>0= no engagement</p> <p>0.25= communicate</p> <p>0.50= communicate &amp; consult</p> <p>0.75= communicate, consult, &amp; involve</p> <p>1= communicate, consult, involve &amp; collaborate</p>

Goals and Metrics	<p>Number of goals likely to yield benefits for the unhoused</p> <p><i>Increase resources such as drinking water fountains, filling stations, bathrooms, showers, kitchens, and laundry facilities in parks and public spaces that can be activated to support community resilience during emergencies (Our County Los Angeles Sustainability Plan, 2019).</i></p>	<p>0 = no goals</p> <p>0.25 = 1-2 goals</p> <p>0.50 = 3-4 goals</p> <p>0.75 = 5-6 goals</p> <p>1 = 7+ goals</p>
Implementation and Monitoring	<p>Describes if there is a detailed implementation plan that addresses the goals identified in the previous section and will yield benefits for the unhoused</p> <p><b>Goal:</b> <i>Create safe (and green) City community centers and care and shelter facilities</i></p> <p><b>Action lead(s):</b> <i>City of Berkeley City Manager’s Office; Departments of Public Works; Parks, Recreation and Waterfront; Health, Housing and Community Services; and the Office of Emergency Services</i></p> <p><b>Partner(s):</b> <i>RMS</i></p> <p><b>Launch timeline:</b> <i>The James Kenney Community Center, which serves as a care and shelter site, will undergo a seismic retrofit in 2016. The City is working with community partners to identify funding to upgrade the other six care and shelter facilities.</i></p> <p><b>Funding Sources:</b> <i>The James Kenney Community Center seismic retrofit is funded by a combination of voter-approved Parks Tax (Measure F) funds, federal grant funds, and the City General Fund. The City is working with community partners to identify funding and financing to upgrade the other six care and shelter facilities (Berkeley’s Resilience Strategy, 2016).</i></p>	<p>0 = no implementation plan</p> <p>0.25 = fair implementation plan</p> <p>0.50 = poor implementation plan</p> <p>0.75 = good implementation plan</p> <p>1 = excellent implementation plan</p>

Equity	<p>Describes if the plan was created with equity as a focus and if the language, goals, and strategies found in the plan prioritize the needs of <b>all</b> disadvantaged communities (this section is open to broader disadvantaged groups)</p> <p><i>Implementation efforts will continue to take equity into consideration, in line with the County's Equitable Development Work Program which includes tools to allow County residents at all income levels to benefit from growth and development (Los Angeles County Climate Action Plan, 2020).</i></p>	<p>0= No evidence</p> <p>0.25= Little to no evidence</p> <p>0.50= Some evidence</p> <p>0.75= Moderate amount of evidence</p> <p>1= Substantial amount of evidence</p>
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### 4.3 Semi-structured Interviews

Between October 2020 and January 2021, 14 semi-structured interviews, that lasted between 30 to 45 minutes, were conducted with key-informants who worked directly on the plan analyzed or is a part of the team updating it. Semi-structured interviews are a highly utilized qualitative method that is favored because it gives researchers flexibility to investigate subjects that naturally arise during the interview (Fylan, 2005). The key-informant interviewed included planning managers, consultants, senior planners, and deputy chief sustainability officers, etc. The interviewees were identified through their jurisdictions public websites and public contact lists. When that failed, administrative staff and planning managers were emailed. Through a snowball sampling method, participants were identified and recruited (Fylan, 2005). Additionally, updated drafts were collected via an email inquiry. The interviews were done remotely over video conferencing, and over the phone. Planners were asked on their perceived level of success to reach curbside communities, the challenges they encountered if an effort was made, and best practices to their community engagement and outreach. Sample questions include (1) To what extent do you think the plan is prioritized to protect vulnerable

populations? and (2) What actions did you take to engage houseless populations during the planning process? At the end of the interviews, participants were asked if they can refer any colleagues that might be interested in participating or would be able to provide more information. A second interview was conducted with the City of Oakland, Los Angeles County, and San Diego City.

#### **4.4 Interview Analysis**

Interviews were transcribed to ensure accuracy and later analyzed using NVivo, a qualitative data analysis software. Through transcription, initial themes were created and later influenced by subsequent interviews (Saldaña, 2014). The first set of codes identified included topics such as, “Challenges,” “Equity,” and “Best Practices.” After these were developed, interviews were coded with more specific subthemes including, “Community Programs,” “Funding,” and “Measuring Equity.” After developing a complete list of codes and subcategories, the data was transferred to Excel where codes were further refined. During refinement, codes were joined with others when similar themes were present signifying that there was a relationship. For example the themes “Neighborhood Leadership Council” and “Community Climate Council” were joined and recategorized as “Community Training Programs.” Other codes did not make the final list because they were not as significant. For example a theme called “Tree Plantings,” was not used because it was not a significant theme across the interviews. The final themes that remained were used to answer the third research question regarding jurisdictions successes and best practices, as well as the limitations and challenges in addressing equity.



## 5. Results

### 5.1 Scorecard Results

After coding, the scorecard was utilized to analyze the 15 plans. The results show that eight plans scored above a zero, and seven plans scored zero, as presented in Table 3. More significantly, no plans had a perfect score of five.

**Table 3**

*Results of 15 CAP and SAP's Analyzed*

<b>Plans</b>	<b>Average Score (Out of 5)</b>
Oakland 2030 Equitable Climate Action Plan (2020)	3.5
L.A.'s Sustainable City pLAN (2019)	2
San Francisco Hazard and Climate Mitigation Plan (2020)	1.9
Our County Los Angeles Sustainability Plan (2019)	1.8
Berkeley's Resilience Strategy (2016)	1.1
Los Angeles County Climate Action Plan (2020)	0.6
City of San Diego's Climate Action Plan (2015)	0.5
City of San Diego Climate Equity Index (2019)	0.4
County of San Diego Climate Action Plan (2018)	0
Climate Smart San José (2018)	0
City of Santa Clara Climate Action Plan (2013)	0
County of Santa Clara Climate Action Plan for Operations and Facilities (2009)	0
San Francisco Climate Action Strategy (2013)	0
City of Berkeley Climate Action Plan (2009)	0
Alameda County Community Climate Action Plan (2014)	0

The City of Oakland's Equitable Climate Action Plan (2020) has the leading score which is attributed to their ability to center equity in their plan. The City has prioritized their frontline communities and taken an active approach to identify their most vulnerable populations. The actions of the ECAP (2020) were created to be "equitable, realistic,

ambitious, balanced, and adaptive” (p. 2). Throughout the plan, the City of Oakland repeatedly linked the issue of climate change with the ongoing housing crisis by explicitly identifying unhoused populations as the most critical and the most in need of housing security during climate events. Furthermore, the City of Oakland worked with an equity facilitator team, Environmental/Justice Solutions, who led their community engagement and served as the equity facilitators. The equity team was instrumental to the plan and also created a supplementary report ‘Racial Equity Impact Assessment & Implementation Guide’ (2020), that includes key recommendations to improve the city’s efforts to address social justice. These recommendations are, “identify frontline communities, utilize GIS mapping to increase data visualization and accessibility, maximize equitable outcomes, monitor and evaluate outcomes, and increase and streamline communication” (p. 4).

The second top score was Los Angeles’ Sustainable City pLAn (2019), which had ambitious goals such as ending street houselessness by 2028, expand communication of cooling centers (public spaces where people retreat to during hot summer days) to residents via the NotifyLA app, and update cooling centers to be able to serve elderly and persons with disabilities. Another goal mentioned in the plan is to establish permanent drinking water fountains in Skid Row.

San Francisco has a robust selection of plans that addresses different challenges affecting the region. Although their Climate Action Strategy (2013) did not perform well, their Hazard and Climate Mitigation Plan (2020) scored third. This plan focused on San Francisco’s response to hazards, including climate change and natural disasters. With this in mind, a few key goals for this plan included developing a homelessness disaster

response plan, and to develop a public outreach and awareness program around heat and health to inform the public of open cooling centers during high temperature days.

Despite the fact that two plans for Los Angeles County were analyzed, they were created by two different organizations. The Our County Los Angeles Countywide Sustainability Plan (2019), was prepared by the Chief Sustainability Office, and the Climate Action Plan (2020) was prepared by the County Department of Regional Planning. The Our County (2019) plan used more equity language and included goals such as increasing resources (drinking water fountains, filling stations, bathrooms, showers, kitchens, and laundry facilities) in parks and other public spaces. Additional goals include expanding their capacity to respond to emergencies through certified emergency response teams (CERTs), and develop minimum requirements and best practices to access resources (e.g. cooling centers). In contrast, the County Climate Action Plan (2020) only has some equity language and goals that would benefit disadvantaged communities such as free transit passes, and tree plantings. Furthermore, the plan does acknowledge the lack of adaptation goals present and alludes to a climate vulnerability assessment and adaptation planning process that will occur in the ‘near future.’

Berkeley’s Resilience Strategy (2016) received most of its points due to their implementation plan which details the action, partner, launch timeline, and funding resources. Upon further research into two of their goals, it was revealed that the City launched a 58-locker storage unit program for unhoused populations in 2018, and created seven care and shelter sites (Chung, 2018). Two plans were analyzed from the City of San Diego, their Climate Action Plan (2015) and the accompanying Equity Index (2019).

Both documents spoke about prioritizing environmental justice to ensure equitable distribution of services to disadvantaged communities. Goals from the CAP (2015) included, increase urban tree canopy by 15% by 2020 and promote green jobs for lower-skilled and low-income workers as a strategy to “provide a pathway out of poverty” (p. 48). Although green jobs would benefit both the economy and environment, the goal does not explicitly state if unhoused populations will be prioritized. Additionally, stated in the plan is the city’s inability to address adaptation, but add that they are in constant effort to obtain more funding to eventually develop a comprehensive adaptation plan.

Major findings from the seven plans that received a score of zero were that (1) they did not explicitly define what groups make up their communities of concern, and those that did provide this definition failed to acknowledge unhoused communities. Additionally, (2) they did not explicitly state that they met with unhoused groups or unhoused service providers. The goals and mitigation strategies (3) did not take into consideration the vulnerabilities of unhoused populations, and (4) the outlined mitigation strategies did not speak to adaptation or equity. Lastly, (5) adaptation was not a priority, and disregarded as an independent issue that should be addressed in its own plan.

## **5.2 Scorecard Results Across the Categories**

The scores of each category were added up for a possible 15 points and averaged, as presented in Table 4. Of the five categories, equity was the highest scoring category (4.13), followed by implementation and monitoring (2.75), stakeholder representation (2.63), goals and metrics (2), and lastly stakeholder engagement (0).

**Table 4***Scores of 15 Plans Across Five Categories*

<b>Category</b>	<b>Mean</b>	<b>St. Dev</b>	<b>Inter-Rater Reliability</b>
Equity	0.275	0.506	0.873
Implementation and Monitoring	0.183	0.424	1
Stakeholder Representation	0.175	0.415	0.981
Goals and Metrics	0.15	0.416	1
Stakeholder Engagement	0	0	1

Across the five categories, plans scored most often in the equity category. Eight plans had a range of equity language that connected climate change to their communities of concern. Although the second top scoring category was implementation and monitoring, it was analyzed with the ‘goals and metrics’ category. For example, if one jurisdiction had one goal then they would receive a 0.25 score in the ‘goals and metrics’ category, and if that goal had all of the requirements in the ‘implementation and monitoring’ category, then they would receive a score of one in that category. Although the results show that jurisdictions did not identify many goals, those that did had good implementation plans. Five plans identified goals that would benefit unhoused populations. For example, LA’s City pLAN (2019) included upgrading and expanding notifications of available cooling centers. Other goals in this plan included establishing drinking water fountains in the Downtown Skid Row area. A common goal between the City of LA, Berkeley, Oakland, and San Francisco was the establishment of resource centers. These resource centers are meant to answer to an emergency by providing resources to communities, and can serve as cooling centers, shelters, or warming centers. In the ‘stakeholder representation’ category, only two plans explicitly identified

unhoused population as a community of concern. Lastly, the stakeholder engagement category received a zero because no plan explicitly stated that unhoused populations or service providers were involved or engaged. In Oakland's Racial Equity Assessment and Implementation Guide (2020), they list an organization that serves this population as a stakeholder but did not explicitly state their level of engagement.

Although plan evaluation is a great reflection of a jurisdiction's goals and targets, they can only tell so much. Further research was necessary to learn if there are any strategies that were not included in the plan but are possibly discussed in the plan update. Therefore, this research was supplemented with 14 semi-structured interviews, to determine the best practices and successes, as well as challenges and limitations of integrating more issues of equity and houselessness into local plans.

### **5.3 Plans Successes and Best Practices**

Interviews with key-informants from the jurisdictions selected uncovered several best practices and successes, as presented in Figure 2. The following section represents the results of the 11 jurisdictions, and not the individual interviewees, because second interviews were conducted in three jurisdictions. Although the best practices pertain to one plan, it represents the same jurisdiction, therefore results are representative of the jurisdictions.

**Figure 2**

*Successful Strategies and Best Practices*



*Note.* Themes in this figure correspond to the best practices that were mentioned by 11 jurisdictions with respect to integrating houselessness and equity into their plans.

***Engagement with Local Organizations***

All 11 (100%) jurisdictions shared the value of working with community-based organizations during the development of their plan. They did this by identifying key stakeholders in the community, connecting, and inviting them to info sessions and workshops, and asking them for feedback on draft versions of the plan. Consulting local organizations and asking for feedback was a method used by the City of Oakland as they attempted to reach unhoused populations and their service providers. One interviewee noted:

We reached out to people [...] and told them about our policies, and asked them to share the announcement, or discuss it with their members. Also, we asked if they had grassroots advice that they can give to us about how to shape the plan. Once we had draft policies, we were sending them to CBOs that did that work and asked, what's missing? [...] I know that some of the best events that we had, people from that community [houseless] attended

and so we were able to touch them directly through events in the community (City of Oakland, personal communication, November 5, 2020).

As mentioned by a participant from the City of Oakland, they effectively connected with a small group of unhoused individuals and a service provide. However, it is unclear the extent to which these groups participated beyond attending.

Additionally, LA County attributed their ability to conduct extensive community outreach to a partnership created with five anchor organizations. A participant from LA County noted:

Having a substantial amount of budget to have a stakeholder engagement process that has an equity statement and process around it was an important step for us. Which of course involved bringing in community-based organizations to be part of the consulting team [...] They were stipend, we set aside outside funding to properly resource the organizations that are ultimately part of our team, and we had what we call anchor community-based organizations per supervisorial district, so that meant that we had five, they had stipends of around \$20,000 to do specific tasks such as help us host community workshops (Los Angeles County, personal communication, January 19, 2021).

Anchor organizations are local for-profit and non-profits groups that have strong ties in their communities especially in lower-income communities (Warren, 2018).

According to the Our County Stakeholder Engagement Summary (2018), LA County was able to convene with 155 stakeholders and leaders representing 115 organizations. Through grants, the county was able to fund five anchor organizations from their five districts, as listed below.

- District 1: East Yard Community for Environmental Justice (EYCEJ)
- District 2: Strategic Concepts in Organizing and Policy Education
- District 3: Pacoima Beautiful



- District 4: Communities for a Better Environment
- District 5: Day One

Although not included as one of their main five anchor organizations, planning staff mentioned that they were able to reach unhoused populations through a partnership with LAHSA, who have an existing relationship with curbside communities in LA County. Other jurisdictions worked with CBO's, but LA County was the only one that noted their ability to fully compensate their organizations.

### ***Prioritization of BIPOC Communities***

Through the development of the plans, six (55%) jurisdictions expressed that their best practice is leading with strategies that will not further negatively exacerbate their most vulnerable populations. One approach was to develop tools to identify the vulnerable neighborhoods and populations such as a racial impact assessment, checklist, and an equity index in order to create strategies that will not target them.

#### **Racial Equity Assessment.**

The City of Oakland developed a racial equity assessment, which serves as a framework for equitable implementation. In this document, they detailed every action by department and identified some of the equity gaps that are likely to be “overlooked or forgotten or swept under the rug” (City of Oakland, personal communication, November 5, 2020). One of the communities they identified as underrepresented was the unhoused communities, which they said was frequently brought up as “one of the biggest equity gaps there is.”

#### **Climate Equity Index.**

The City of San Diego created an accompanying climate equity index, which serves as a definition of who belongs in their communities of concern. The City of San Diego compares their climate equity index as the “local level version” of what CalEnviroScreen is at the state level. CalEnviroScreen is an OEHHA mapping tool that spatially identifies communities in California that are impacted by multiple sources of pollution and scores their vulnerability to pollution's effects based on their environmental, health, and socioeconomic status (Witteborg, 2019). Developed tools such as CalEnviroScreen, were also mentioned by other planning staff, including Oakland who said that this tool “helps visualize cumulative burdens so as to understand why equity matters,” and why it should be a focus of the planning process (City of San Diego, personal communication, November 12, 2020).

### **Flower Tool.**

Other tools mentioned through the interviews include the Flower Tool, a visual tool used to initiate community engagement and discussion on how to implement climate investments for multiple, equitable benefits (Climate Interactive, 2021). Seeking these free tools is a great way for jurisdictions to get comfortable with the idea of integrating more equity policies into their plans without having to ‘reinvent the wheel’ and visualize cost-effective and equitable climate solutions.

### ***Compensating Stakeholders***

Four jurisdictions (36%) have worked to address feedback fatigue by compensating groups that have been valuable to their planning process. In this case, feedback fatigue is developed when cities and counties regularly ask the same organizations for feedback on a variety of issues, which causes the organizations to gradually lose interest, feel

frustrated, and eventually experience fatigue, resulting in lower response rates or lower-quality feedback (Glazer, 2015). Through a grant awarded by the Urban Sustainability Directors Network (USDN), the City of San José was able to hire an equity fellow that will assist in exploring more equity topics and reaching out to organizations that work in the City. They have expressed interest in learning more about the connection between climate change and houselessness throughout the interview. This funding will also go directly to fund the community-based organizations themselves. The City of San José noted that:

A lot of other groups and city departments are looking at the same groups and trying to get them to work with them, but most are already ‘spread’ with other commitments and responsibilities, therefore it is helpful to have them work on these plans and also pay them (City of San José, personal communication, November 6, 2020).

One example of an organization is SOMOS Mayfair, an organization working with the Latinx community of San José.

Furthermore, the City and County of San Francisco recognize that it can be difficult for participants with families and multiple jobs to attend meetings, therefore they intend to compensate their participants. San Francisco raffled a \$100 gift card to participants who attend one of their climate workshops. They also formed a 'Community Climate Council,' which is a group of ten San Francisco-based community leaders who are interested in offering substantive feedback on the CAP update's equity, strategy, messaging, and public engagement. Members of the Council would be required to participate in three virtual meetings, and would be compensated for their time with a \$1,000 stipend, which they have the option to donate to a charity of their choice.

In Los Angeles County's Stakeholder Engagement Summary (2018), the County addressed staffing capacity challenges by providing participation stipends for nonprofit organizations that attended a workshop and completed a survey. The funding for the stipends was awarded by Partners for Places national philanthropic initiative and matched by the Conrad N. Hilton Foundation, California Community Foundation and the LA'n'Sync initiative of the California Community Foundation, which awarded the county a total of \$175,000 (*OurCounty Stakeholder Engagement Summary*, 2018). The stipend was split in two levels (Tier 1 or 2) depending on the eligibility of the organization. Tier 1 stipends were set at \$700 per workshop attended, and Tier 2 at \$200 per workshop attended. To be eligible for these stipends, organizations needed to meet a series of criteria, including a maximum budget of \$5 million, conducting a minimum of 75% of their work in LA County. At the end of the six workshops conducted, 72 eligible nonprofit organizations received a total of \$64,300 in stipends. Despite the large budget to engage with the communities in Los Angeles County, there was no anchor organization that served the unhoused populations. Additionally, the participant was unable to explicitly state how they served the unhoused population.

### ***Direct Community Engagement***

As opposed to gaining information about a community through local organizations, jurisdictions have worked to directly engage with their communities. Three (27%) jurisdictions shared a few strategies that they implemented during their outreach phase, as presented in Table 5. These include listening sessions, community training programs, and equity workdays.

**Table 5***Direct Community Engagement Strategies by Jurisdictions.*

<b>Strategy</b>	<b>Purpose/Goal</b>	<b>Target Community</b>	<b>Partner/ Cohost</b>
Listening Session	<ul style="list-style-type: none"> <li>• Examine historic, current, and projected climate impacts to communities including extreme heat, wildfire, sea level rise, drought, and flooding.</li> <li>• Examine data on physical infrastructure such as public transportation systems.</li> <li>• Examine data on social vulnerabilities such as health conditions.</li> <li>• Analyze the potential interactions between physical infrastructure and social vulnerabilities.</li> <li>• Guide priorities for climate adaptation and resilience efforts, policies, and programs.</li> <li>• Inform public health preparedness, emergency preparedness, response planning, and community resiliency</li> </ul>	8-10 service-providers	<ul style="list-style-type: none"> <li>• Los Angeles Homeless Services Authority (LAHSA)</li> <li>• Climate Resolve</li> </ul>
Neighborhood Leadership Cohort	<ul style="list-style-type: none"> <li>• A group of Oakland residents that assisted the City and co-developed everything with them.</li> <li>• This group included at least two members of an overburdened frontline community for each district in Oakland.</li> </ul>	City of Oakland community members	<ul style="list-style-type: none"> <li>• City of Oakland</li> <li>• E/J Solutions</li> </ul>
Equity Workdays	<ul style="list-style-type: none"> <li>• Days organized to invite community members to do hands-on activities in the community while also fostering a discussion around an important topic in the ECAP.</li> <li>• For example, building tiny homes for unhoused youth, while</li> </ul>	City of Oakland community members	<ul style="list-style-type: none"> <li>• City of Oakland</li> <li>• E/J Solutions</li> <li>• CBOs</li> </ul>

	learning about climate and housing justice.		
Community Climate Council	<ul style="list-style-type: none"> <li>• Select group of 10 SF-based community leaders interested in providing meaningful feedback related to equity in CAP strategies, messaging, and public engagement process</li> <li>• Participate in three virtual meetings, serve as community ambassadors</li> </ul>	San Francisco Community Members	<ul style="list-style-type: none"> <li>• City and County of San Francisco</li> </ul>

***Culturally Appropriate Material and Communication Strategies***

Facilitating community meetings is not a uniform strategy across communities. Three jurisdictions (27%) have taken this into consideration while conducting community outreach. Since California is one of the most culturally diverse states in the country (McCann, 2020), the strategies for engagement must be adapted to each community so as to ensure equitable participation. By practicing equitable engagement, the City of San José has prioritized creating workshops and writing materials accessible in different languages, as well as offering translation accommodation in Spanish and Vietnamese, the primary languages spoken in the City. San Francisco also noted that a series of eight workshops will be available in different languages, material will be made available online.

In addition to creating inclusive material, another approach used by planning staff is to meet with community members in common places where they frequent. This was a practice done by Oakland’s neighborhood leadership cohort, as noted by an interviewee:

They [neighborhood leadership cohort] canvassed their neighborhoods and went door to door, they went to businesses, and festivals. So it was not just emails announcing a meeting, it was residents going to their own neighborhoods, talking to their neighbors, handing out flyers and explaining what the ECAP was

about. I just really cannot emphasize enough how much that cohort of folks really helped shape our work (City of Oakland, personal communication, November 10, 2020).

Outreach done by community members was a great way to invoke participation, and more importantly trust within the community. Additionally, community leaders were able to voice the issues affecting their communities. It was not however, stated that unhoused groups were reached through the use of this cohort.

For Los Angeles County, the anchor organizations that carried out the community engagement phase helped develop events with groups that are trusted and known in the community. A participant from LA County noted:

I would say a key thing for us was going to people who represent vulnerable communities themselves and having events in a culturally relevant context with trusted partners that they already know. So it was not necessarily the Chief Sustainability Officer event, it was East Yard Communities for Environmental Justice hosting this workshop. And each one of our five anchor organizations that all represented vulnerable communities very much tailored the material and the language to the folks that they know in their community (County of Los Angeles, personal communication, January 19, 2021).

Through these partnerships, cities and counties become informed on the local needs and build trust and community buy-in. At the same time, CBOs are able to raise the voices of their community and recommend strategies that is in their best interest.

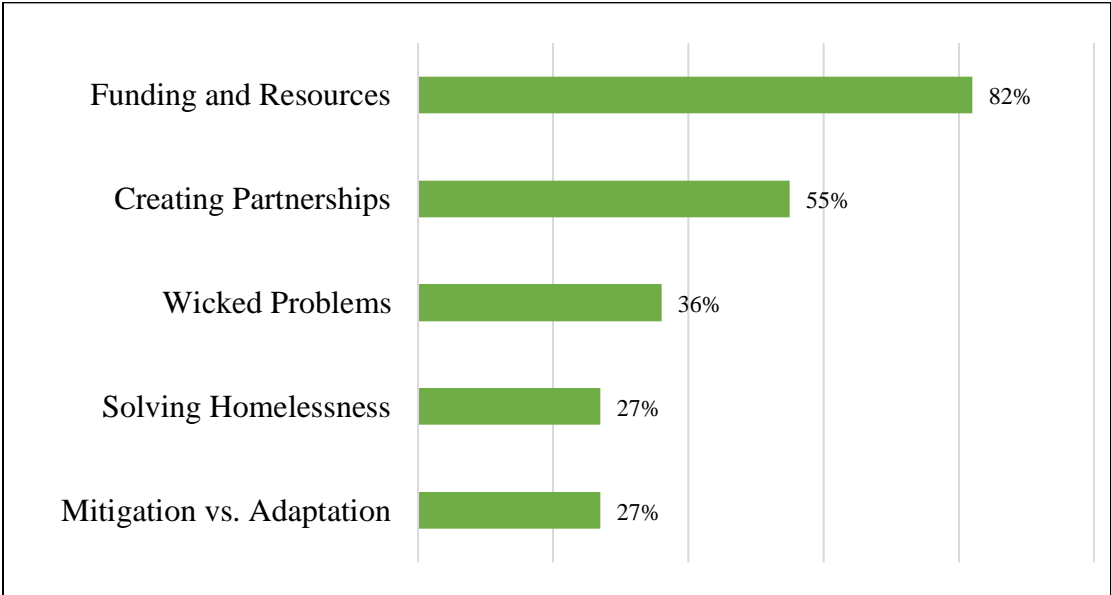
#### **5.4 Plans Challenges and Limitations**

During key informant interviews, planners from jurisdictions were asked if they anticipate incorporating more equity into their plans, all 14 interviewees representing 11 jurisdictions responded in agreement. However, many brought up concerns and

limitations to doing this. The following challenges are the more prominent issues raised by jurisdictions, as presented in Figure 3.

**Figure 3**

*Challenges and Limitations*



*Note.* Themes in this figure correspond to the challenges and limitations faced by 11 jurisdictions with respect to integrating houselessness and equity into their plans.

***Funding and Resources***

Most significantly, nine (82%) jurisdictions claimed that a lack of funding prevented them from exploring equity topics in their plans. The City of Oakland noted that there is no funding available to address houselessness and often the topic becomes focused on shifting the blame.

The City of Berkeley acknowledged that funding limited their outreach efforts and impeded their ability to compensate community members and organizations due to the dynamics with their consultant team. When consultants are hired to do outreach with



community members/organizations, they are paid for the information gathered from community members. However, the community members/organizations that provided their lived experience and insight do not receive any compensation. To amend this, the City of Berkeley has attempted to compensate these community groups but have found that there are several barriers, as one participant noted:

It is a big problem because cities have very strict ways that we spend money, usually there's competitive solicitation. So, how do you value an organization's connection and insight in their community, if it is just going to the low bid, and then it is really hard to pay people individually. The way we've done it is when we get grants from outside agencies we try and have them go through community organizations or include community organizations in that process, so they can get the money from the outside organization. Also, we've had them pay participants and sometimes it's just been in the form of gift cards, you know, for like under \$50 or something. So it is not ideal, but it's just what we've been able to do in the context that we have (City of Berkeley, personal communication, October 30, 2020).

The City of Berkeley was able to bypass the strict budget guidelines that prohibit them from fully funding organizations. When a system is created to make already-busy planners jump through hoops, the time to include larger issues, such as houselessness, into the plans become seemingly unrealistic.

Unfortunately, a lack of funding and resources such as staff capacity, can have a significant negative impact on participation and plan quality (Woodruff, 2016). Staff capacity in local governments and CBOs are limited and expanded across several projects. Additionally, without compensation already-busy organizations find it difficult to participate due to a lack of availability and incentive. This circumstance can lead to decisions being made on behalf of communities and can lead to inequitable goals and policies.

### ***Creating Partnerships and Building Trust***

Creating partnerships with people experiencing houselessness and organizations that work with this population was identified as a challenge for six (55%) jurisdictions. For those in their beginning stages of the planning process, such as Santa Clara and San Diego County, initiating a partnership is a challenge as they have not yet identified groups or service providers. Therefore, they would need to rely on the pre-existing relationships that colleagues in other departments have already established with these groups or try to build a connection through online platforms.

On the other hand, Alameda County was hesitant as to how they would be able to involve unhoused populations into the planning process. They note that this group is, “hard to reach due to their nomadic nature of moving across city and county lines into unexpected areas” (Alameda County, personal communication, October 20, 2020). Aside from identifying the right groups to work with, there is also the challenge of building trust with these organizations, and community members.

For the City of Oakland, rebuilding trust in the community was an obstacle they faced during outreach as they initially received pushback from community members. The community was not interested in participating due to a loss of faith due to the inaction they saw after the adoption of Oakland’s 2020 Energy and Climate Action Plan (2012). To combat this, the equity facilitator and team used a “grab bag of strategies” to try to “meet the community where they are” as noted by one participant:

That could be fatal for a normal outreach process, but not to us [...] so instead of forcing them to come to another workshop we went to their regularly scheduled meetings and gave our presentations there and asked people for the feedback right there on the spot (City of Oakland, personal communication, November 05, 2020).

The City attributes their ability to engage with a larger range of community members to their extensive engagement that included spontaneous meetings in local businesses, as well as staying late to answer any and all questions. However, using the same techniques to reach unhoused populations was not mentioned.

### ***Wicked Problems***

Four (36%) jurisdictions expressed challenges that are characterized as wicked problems such as NIMBY, gentrification and displacement, and the issues of solving houselessness. The City of San Diego noted that there was opposition from community members after they redirected grant funding to disadvantaged communities. The subsequent opposition led the affluent community to compare the situation to a ‘Robin Hood scheme,’ a name used when funding is redistributed to poor communities (Saghaye-Biria, 2001). In Los Angeles County, community members have been hesitant over the strategies imposed by the County as they fear sustainability strategies will lead to green gentrification. Gentrification and displacement can lead to houselessness and can exacerbate the existing crisis, which puts cities and counties cautious of the policies that they put in place to promote sustainability.

### ***Solving Houselessness Through a Housing-first Approach.***

A challenge expressed by three (27%) jurisdictions was around the feasibility of ‘solving houselessness’ while also addressing climate change. LA County expressed the difficulty of this by stating that, “it took several decades to manufacture the problem that we're in right now with houselessness, I think it'll take several decades to get out of it, hopefully not, hopefully maybe one or two” (County of Los Angeles, personal communication, January 19, 2021). The City of Berkeley went on to comment that the

issue of houselessness was a daunting task that they were not sure could be solved at a city level. A planner from the City of Berkeley went on to say this about houselessness:

And then the other issue is, can we really solve the housing issue at a city level? There were a lot of stories about San Francisco, where at the start of the [COVID-19] pandemic they started housing people in hotel rooms and then people kind of flocked to San Francisco. So they had the same number, if not more homeless people after they were able to provide temporary shelter. So I mean there's just that piece. I am not an expert, but it seems daunting, where do you say okay we are going to house all our current homeless people. Then what happens when new people come in? You do not want to shut the door behind. It is a daunting problem to me, and it is not my area either, but I sort of see it as an outsider working on climate, I do not know how you are going to solve homelessness (City of Berkeley, personal communication, October 30, 2020).

Understandably, viewing the challenges of climate change and houselessness and attempting to solve them can be overwhelming. However, negating services to this population over fear of being flocked by more unhoused individuals only continues to prioritize the City and not its inhabitants.

As for creating more strategies for unhoused populations into their CAPs, the City of Berkeley mentioned the difficulty that it was to make the direct connection to climate change until people are housed. Similarly, the City of San Diego has noted the challenge and controversy that it takes to allocate funds, therefore the city has prioritized housing and services to help this population as stated by one participant:

I think first, the primary goal is getting people off the street, and so we have this homeless navigation center system that was set up a couple of years ago. It was controversial because we asked, should we spend money on building a facility, or staffing of a facility that navigates all those people to services, or should we spend the money on the services themselves? For example, when it comes to homeless storage facilities there's always that discussion of is that something we should invest in? or should we invest in first putting housing units together. So there is always a debate on how best to spend our funds. We try to spend the money that we can, but there is a lot of strings attached to different funds. So we try to spend the money that

we can first and foremost on housing the homeless and making sure the services are in place. So that is really our priority is getting people off the streets (City of San Diego, personal communication, November 20, 2020).

Housing is undeniably important, however, receiving housing does not guarantee that re-introduction to society will be smooth for unhoused groups. Additionally, the construction of housing can take several years. Services, as noted by the City of San Diego, are just as necessary to be offered while attempting to house communities. Despite this, these two jurisdictions along with others, did not mention incorporating climate strategies that unhoused groups can use while they wait for housing, which can range from 5-20 years.

### ***Mitigation vs. Adaptation***

For three (27%) jurisdictions, the limitations of what can be included in traditional CAPs was a challenge. LA County expressed the difficulty to bring more equity-centered concepts into their plan due to the traditional manner in which mitigation and adaptation issues are dealt with, as indicated by a participant:

This is where you know this project has been tricky because the Climate Action Plan is so specific to be a mitigation plan. If we were doing a climate action and adaptation plan, we would be able to include this discussion and so many other related topics. When we start to talk about adaptation, that is really when we could consider vulnerable populations and start to consider all these different aspects, but when we are just looking at the mitigation of GHG emissions, you really need to just look at, well, where are they being emitted and how can we change our behavior? (County of Los Angeles, personal communication, October 9, 2020).

In traditional climate action planning, mitigation is the most accepted form of strategies to tackle climate change. Furthermore, LA County, along with Alameda County

mentioned that they will continue to create mitigation-focused plans, which consequently leave social justice issues out.

The City of San Diego shared that although they were not able to work with unhoused groups during the development of their CAP, they can see that it would be a possibility in the climate adaptation and resiliency plan that they are creating. One participant stated, “oftentimes when I am working with resiliency that is really where you focus on vulnerable populations as this is a category that unhoused populations would fall into” (City of San Diego, personal communication, November 20, 2020). Despite unhoused populations not fitting into the scope of the CAPs, it was found that their Climate Equity Index also lacked to include this population into their plan. Alameda County acknowledged the need to include more equity topics, they noted that they will continue to work on mitigation strategies due to a lack of funding and staff capacity.

## 6. Discussion

Prior studies have shown that the field of sustainable development has failed to address social justice and equity issues (Fainstein, 2018; Finn & McCormick, 2011; Harris et al., 2017; Meerow et al., 2019), which is supported by this research. The first objective of this research was to identify the plans from cities and counties in California that created goals and strategies that included unhoused populations. This assessment is a first step toward recognizing the gaps, limitations, and best practices for developing inclusive plans. Findings show that two out of the 15 plans explicitly connected unhoused individuals as a climate vulnerable population (Oakland and San Francisco). Furthermore, during the interviews only two planners disclosed that they were able to reach unhoused populations through their community engagement (Oakland and Los Angeles County).

The inability of nine jurisdictions to achieve this synergy can be attributed to two factors: (1) planners' and jurisdictions' unwillingness to use their power to act, and (2) gaps in their stakeholder engagement plan. The inability of planners and jurisdictions to act is reminiscent of previous research by Uitermark & Nicholls (2017), who described the "power of representation dilemma," which occurs when outsider planners are tasked with representing the interests of marginalized communities with which they may not identify. This power struggle is conflicting because planners can assume dominance over communities, resulting in decisions that do not reflect local needs or interests (Uitermark & Nicholls, 2017). There are numerous compromises associated with this power structure. Based on the findings of this study, it is evident that planners prefer to design plans that allude to environmental and equitable issues while excluding members of the

community who are most suited to comment on these issues. This is in line with assertions made by Meerow et al. (2019), who discovered that while more equity concerns are integrated into plans (Angelo et al., 2020), they may not be implemented. This was true for several jurisdictions, including the City of Santa Clara, which stated that they would be able to use a variety of techniques to reach this group, but that this would happen after the plan has been adopted, not before. Despite early CAP adopters (2004-2008) showing more evidence of progressive social equity considerations, more direct action to address local needs is needed when developing plans (Angelo et al., 2020). The opportunity to expand on social equity topics across climate action planning by incorporating more local issues would allow planners to address topics of houselessness.

The second objective of this thesis was to understand the level of participation that unhoused populations played in the development of the 15 plans analyzed. All jurisdictions acknowledged having some level of community engagement. During the interviews, the City of Oakland and LA County shared that they were successful in connecting with unhoused populations during their community engagement. However, based on Arnstein's (1969) famous Ladder of Citizen Participation, Oakland reached the third level of 'Informing' as unhoused individuals attended one of their outreach events. In regard to their ability to reach service providers, the City of Oakland reached level four 'Consultation' because they sent public inquiries and asked for feedback on their plan draft. LA County reached the fourth level 'Consultation' as they were able to reach nine participants during their listening sessions with service providers, which will be used to inform their climate vulnerable assessment. Despite the advanced theory of citizen



participation and the benefits that come with extensive community engagement (Burby, 2003; Hahn et al., 2020; Hassenforder et al., 2015; Prado, 2021; Vogler et al., 2017), unhoused populations continue to be left out (Klein & Riemer, 2011). Despite California having the country's highest unhoused population, nine jurisdictions failed to reach out to houseless individuals through their community engagement effort.

Without addressing the procedural injustice faced by unhoused populations, are planners really able to plan resilient and just cities? Studies have shown that the most vulnerable residents are not those that typically attend public meetings (Laurian, 2004; Meerow et al., 2019). While discussing community participation initiatives, jurisdictions brought up the difficulties that residents have when attempting to attend a local council meeting. Meetings are frequently scheduled during working hours or do not offer childcare, creating barriers for working populations. There are several barriers that prevent unhoused groups from attending and participating in city-led events. For example, because they do not have a phone and hence are not on listservs, they frequently have no idea when or where meetings will be held. Furthermore, even if they were informed of the meetings, they may lack transportation or be frightened to leave their possessions in the event that they are stolen or taken during a random sweep. For unhoused folks, meeting locations can be intimidating because they may have to go through extensive security procedures to gain entrance to places like city hall. Due to the multiple obstacles that outweigh attending these meetings, groups that do not trust city/county leaders often opt out from participating in local politics. This provides even greater impetus to employ strategies that get planners out into communities, where they can communicate to people in a secure and comfortable environment.

The third objective of this research was to understand the successes and challenges, as well as the challenges and limitations that jurisdictions face when addressing equity topics in their plans. The five main successes found through the interviews were (1) jurisdictions engagement with local organizations; (2) efforts to prioritize BIPOC communities by creating goals and strategies that would not further exacerbate them; (3) ability to compensate stakeholders for their time and participation; (4) direct engagement with the community through various modes (e.g. listening sessions, equity workdays, and community training programs); and (5) development and use of culturally appropriate material and communication strategies. Although not explicitly stated, a jurisdiction's ability to reach populations and increase participation relies on their ability to build trust. For example, in a research by Dum (2017), residents were barred from delivering food to unhoused persons due to local constraints. Restrictions like this have a negative impact on unhoused populations and erode people's and service providers' trust in the city/county/state to ameliorate their oppression. One approach to build trust is to use a relationship-centered community engagement that invokes the feeling of being seen, valued, and heard (Prusia, 2019). It should be noted that although all jurisdictions have engaged their community in some capacity, no one was able to reach a partnership with unhoused groups.

The challenges and limitations raised by planners includes (1) inefficient funding and resources. Fiscal restrictions are a common stumbling block for CAP creation and implementation, and they can become much more difficult to resolve if competing issues emerge (Alexander, 2020; Saha & Patterson, 2008). Climate change and a lack of resources are putting further strain on services and the quality of assistance provided to

persons who are houseless (Berisha et al., 2016; Every & Thompson, 2014; Gibson, 2019). Additionally, (2) difficulty in creating partnerships with unhoused populations and service providers. Unhoused populations have little to no trust in city and county governments, as many have been criminalized by police and have been targets of sweeps that destroy their belongings (Amster, 2003). Furthermore, (3) wicked problems of NIMBY, gentrification, and displacement, which prevent the establishment of houseless services in particular areas (Bonds & Martin, 2016); (4) the attempt of planners to ‘solve houselessness,’ through a housing-first approach which has not been shown to be effective to end houselessness at a community level (Eide, 2020); (5) following a traditional mitigation framework to address climate change and setting adaptation aside even though it is known that climate change is unavoidable, and adaptation strategies must be created to increase the resilience of vulnerable societies (Pielke, 2007). Notably, a lack of funding and resources was mentioned to limit jurisdictions’ ability to conduct substantive public engagement. The City of Oakland mentioned that equity issues are considered to be “too costly,” but they argue that this is a myth and tackling climate change through an equity lens is actually cost-effective. For example, strategies to reduce vehicle miles traveled (VMT) include centering housing in transit-oriented developments (TODs). However, due to gentrification, lower-income communities are being displaced further and further out of the city resulting in longer commutes to their places of work. The city has addressed this issue by prioritizing affordable housing in TODs; otherwise, stations become an amenity, increasing property values and displacing more people. Furthermore, an increase of participation is not a linear result of a large budget. Despite LA County’s large community engagement budget, participation was a weak point and

only those that were already interested in the plan development attended the workshops and focus groups.

On the other hand, state funding used to address houselessness is usually distributed to the cities and counties with the highest concentration of people experiencing houselessness. California's 2019-2020 general fund expenditures is prioritized to constructing emergency shelters and navigation centers, rapid rehousing, permanent supportive housing, job programs, and for innovative projects like hotel/motel conversions (LAO, 2019). As the majority of the funding received by cities and counties are geared towards construction projects, it limits the ability of local governments to address climate threats. For example, housing programs like Project Homekey, a grant program that helps nonprofits buy vacant hotels, motels, and apartments to serve unhoused people, would receive an additional \$750 million in 2020. (HCD, 2015). Other funding to operate cooling and warming centers in California come from PG&E grants (Allen, 2020). Cooling centers can be a great strategy to help communities alleviate the heat from the summer months. According to the LA times, cooling centers cost \$2,000 per day to operate (Reyes, 2020). Unfortunately, houseless activist Theodore Henderson told Herr (2020) in an interview for grist that he has never used a cooling center and neither has anyone he knows out of fear that their belongings will be removed during a sweep. Another person interviewed stated that cooling centers are merely a temporary solution and that shelters are just as harmful, as he had bronchitis from using their showers. As unsheltered populations wait years for permanent housing, they face the immediate threats of climate change in their tents. This illustrates a need for a deeper, transformative structural change that takes into consideration the different scales of

exclusion to nature and society that climate change inflicts on unhoused populations. There is also a larger need to develop tactics that are not only practical and inviting, but also don't add to the anxiety and trauma that this community already faces. Planners must think creatively and transformatively in order to develop these solutions, as the path to a Just City is dependent on them.

### **6.1 Limitations and Future Research**

One limitation of content analysis is that measuring equity can be ambiguous as there is currently no widely accepted guideline to do this. This can cause further challenges when working with a student researcher who may not be familiar with the topic presented. To avoid human error, the PI should set clear instructions for training the student, and the student should voice any concerns or hesitations they may have to ensure that the procedures are replicable. Another limitation is interviewing planners that were not familiar with the community engagement process of the plan, therefore they were unable to answer specific questions. While prefacing the planners may help them better prepare for the meeting, it also removes the element of surprise and may allow them to construct a scripted response. Another drawback of the model used in this study is that it excludes climate adaption plans. Climate adaption plans allow jurisdictions to delve deeper into issues of social justice and equity. Doing a content study of adaptation plans in addition to CAPs, when accessible, would help give a broader oversight into jurisdictions' planning priorities. Another limitation of the study is the small number of interviewees and plans reviewed, resulting in a lack of representation of all California jurisdictions. Furthermore, due to COVID-19 and the subsequent pandemic, some stakeholders and viewpoints from the research and planning process, such as the

unhoused, were neglected in this study. Future research that involves this group in the development of methodological approaches and objectives will allow for a more inclusive practice to ultimately create more equitable climate strategies.

## **7. Conclusion and Policy Implications**

California, the world's third largest economy, is lauded for its environmental achievements. Despite this, the state continues to struggle with the nexus between climate change and homelessness. Key findings from this study show that while cities and counties are becoming more progressive by incorporating more social equity considerations, they digress during implementation. Adaptation strategies that are relevant to houseless populations severely lack and are not prioritized in climate action or sustainability plans. The results suggest the need to encourage a greater sense of partnership with unhoused populations and advocates who are able to inform local government on the gaps in their planning efforts. However, for jurisdictions trained in traditional planning processes of climate mitigation, attempting to address wicked problems of climate change and homelessness seem 'daunting'. On the other hand, unhoused populations have been excluded from the public for far too long that it becomes increasingly difficult to seek redress. Therefore, transformative strategies must be used to recognize the inequities that climate change poses on this population, understand the different scales of oppression that hinder adaptation to climate change, and lastly use creative strategies to build trust and initiate engagement.

This research is the first attempt at evaluating cities and counties ability to address the two issues of climate change and homelessness through the use of a scorecard. After reading the literature and climate action and sustainability plans, as well as speaking with planners, the following recommendations were identified. These recommendations touch upon increasing justice in planning, assisting unhoused communities with services to

protect themselves during a climate event, and to increase participation and trust within the community and planning staff.

The first recommendation is to extend the cooling and warming center hours to allow curbside communities to access these services as climate events worsen and lengthen. Additionally, fresh air centers should be established to protect communities from respiratory ailments on days when air pollution is high. Community members should be taught to act as liaisons between curbside communities and governments, informing them of resource center openings (cooling, warming, fresh air). To increase utilization of these resource centers and shelters, jurisdictions should fund and maintain storage lockers to allow unhoused individuals to protect important documents that are needed to allow them to enter shelters. To increase trust within unhoused communities, jurisdictions should adopt a “send red, not blue” code which means firefighters (who wear red and are more trusted) than police officers (who wear blue) respond to climate disasters (Fogel, 2017). This would invoke less fear and put a hold on the criminalization of this group. Sweeps should be eliminated by jurisdictions since they inflict more stress to communities and displace people from their belongings, resulting in a bigger trust gap between authorities and the unhoused community. Local governments should hire local planners, particularly BIPOC who can connect with their communities, to boost the inclusion of equity ideas and initiatives in plans. They should also require planners to conduct on-the-ground training with the community and local community organizations in their jurisdictions to learn about street-level issues. This would allow them to identify who is a part of their community of concerns and identify who is missing by opening this discussion across departments, and the public. Planners should hold outreach programs in communal



spaces where unhoused populations congregate to learn more about their needs. Try to elicit discussion about climate change in these areas while simultaneously giving a resource, such as food, cold water, or a power bank that will allow people to charge their electronics. Additionally, planners should extend an invitation to unhoused individuals, service providers, activists, and academics to have an active seat in all decision-making spaces. Finally, if goals and strategies are only instituted in one plan, they will be ineffective; instead, planners should coordinate across departments and plans (general, adaptation, resilience, sustainability, and so on) to ensure that the strategies developed are successful, equitable, realistic, and adaptable.

With this fundamental understanding of wicked problems, and recommendations listed, the hope is that this study sparks the initial conversation about developing equitable strategies that identify and address procedural injustices preventing unhoused populations from being included in the development of just and resilient cities. The idea of a just city can become more inclusive of unhoused individuals by diversifying and amplifying perspectives in crucial decision-making meetings, allowing them to not only be heard, but also to receive the resources they need to protect themselves from anthropocentric climatic threats.

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