

Engaging Communities for Climate Resilience Planning

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INTRODUCTION

The field of climate resilience planning has emerged in response to the increased heat, wildfires, storms, and myriad other complex challenges towns and cities around the world are facing as a result of the climate crisis. This paper utilizes a broad definition of climate resilience, encompassing adaptation to changing environmental conditions, improving systems' ability to respond to social and environmental threats, and addressing causes of climate change. While large-scale federal and international action is crucial, climate change impacts will continue to play out among local communities of people around the world. Climate resilience planners and other practitioners will need to work with communities to better understand the threats they are facing and design interventions that provide local benefits. Because of the urgency and complexity of climate threats, as well as controversy surrounding interventions seen as green gentrification, engaging communities in climate resilience planning is uniquely challenging.

This paper will examine community engagement practices in climate resilience planning, with an eye towards how they impact the implementation success of the final plan. The research question is, "what community engagement practices lead to climate resilience plans that achieve implementation steps?" First, the paper will review literature to outline the evolution of community engagement approaches and define climate resilience planning. Then, the two concepts are brought together to explore models of community engagement in climate-related planning, emerging challenges, and current guidance on best practices. Following the literature review, the paper will offer four case studies of climate resilience plans with strong community engagement. The case studies will delve into the "how" of community engagement processes with attention to equity and justice: who was engaged, at what stages in the process, and using what practices. To the extent possible using interviews and research, the case studies will connect community engagement to plan implementation: how was the plan received and progress made towards its actions and goals. Finally, this paper will identify common threads and challenges between the examples to develop actionable recommendations for climate resilience practitioners seeking to work among and in partnership with communities.

LITERATURE REVIEW

Community Engagement

Defining Community

The term community, while widely used in the urban planning and climate resilience fields, is a vague term with conflicting definitions. It can refer to people's location in a physical environment, a sense of group membership, or fulfillment of emotional and other human needs. Communities are products of context, both external factors and internal relationships and organization (DeFilippis et al., 2006). While often seen positively, communities can also be perceived as negative phenomena promoting "social homogeneity and exclusion" (Talen, 2000). Whether referring to a shared identity or geography, the term community has often been used to group individuals together into a single entity, implying a sense of identity that may not be actually felt by individuals being classified together (Head, 2007). This grouping can build power amongst individuals whose views are represented by the group, but it can also exclude minority perspectives and allow a single perspective to falsely claim to represent the whole. Communities are both "vital arenas for social change" and "arenas that are constrained in their capacities to host such efforts" (DeFilippis et al., 2006).

Community Engagement in Theory

Community engagement, similarly, can be defined in many ways, but at its core involves interaction between official institutions and members of the public. Engagement, also known as public participation, can serve many purposes from "box-ticking" to meet legal requirements, to generating higher quality plans and advancing social justice (Bryson et al., 2012). Community engagement enables "people in a defined community [to] have meaningful opportunities to provide input on a project or process... to articulate community needs, concerns, visions, and expectations in ways that result in better, healthier outcomes and more livable environments for residents" (Aboelata et al., 2011). Through interaction with communities, urban planners aspire to create representative citizen participation, "strengthening a community's ability to solve problems through collective effort" (Talen, 2000).

Community Engagement in Practice

Community engagement, as a formally mandated process, emerged in the mid-20th century to guide citizen participation in planning processes in response to the top-down planning of previous decades which harmed many communities and sparked resistance. Arnstein's ladder of citizen participation (Figure 1), published in 1969, offers a hierarchical understanding of participation, beginning with nonparticipation, improving to tokenism, and at its highest form constituting full citizen power (Arnstein, 1969). This model is still helpful today to understand the range of degrees to which community engagement processes allow and support community involvement. While community engagement typically fails to reach full citizen control, the ladder demonstrates how partnership, for example, empowers citizens to a greater degree than informing or consulting them.

The strongest forms of community engagement focus on building relationships from the beginning of the planning process, and offer consistent ways for communities to offer input, make decisions, and tangibly influence planning outcomes (Aboelata et al., 2011). However, in practice, community engagement requires time, financial support, and specialized expertise. It faces many barriers and challenges: lack of information flow between government and communities, oppositional relationships and distrust, lack of institutional commitment, lack of resources and properly trained staff, and a lack of clear goals and expectations (Geekiyanage et al., 2020). In the United States, community engagement is often synonymous with government-hosted public meetings and can favor the voices of those with greater resources. Traditional public meetings see higher participation amongst older, male, white, higher-income homeowners and longer-time residents and often fail to represent the full extent of community perspectives (American Planning Association, 2019; Einstein et al., 2019).

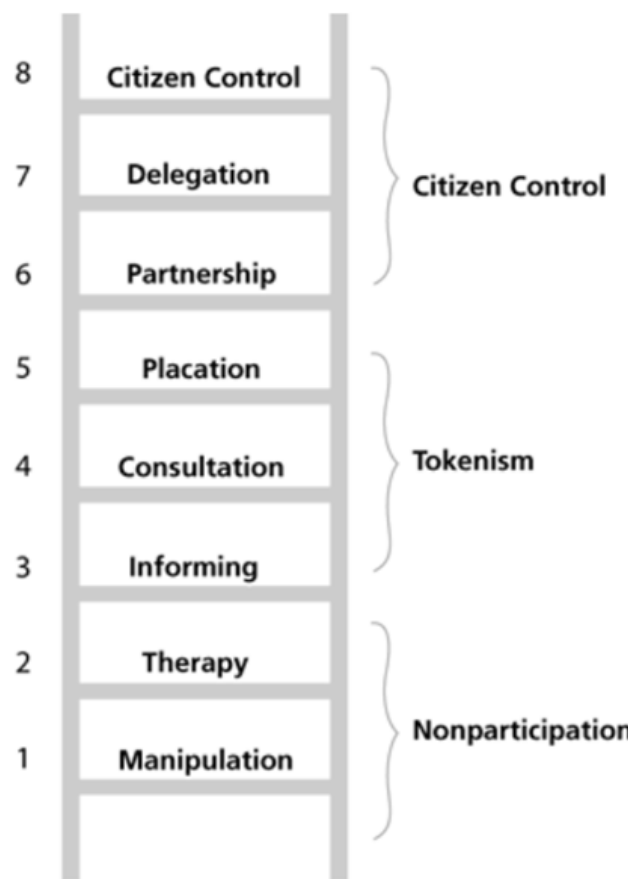


Figure 1. Arnstein's Ladder of Citizen Participation (Arnstein, 1969)

The challenges preventing full, equitable public participation are numerous, but engagement practices have also evolved in response. In the 21st century, engagement has increasingly focused on evidence-based and design science approaches. Evidence-based approaches arm participants with information from research and professional expertise to guide decision-making, while design science cyclically develops, tests, and refines ideas (Bryson et al., 2012). Digital tools for engagement have also been growing in popularity, such as maps and visualizations, data dashboards, citizen-sourced data, and feedback or surveying tools (Al-Kodmany, 1999; Desouza & Bhagwatwar, 2014; Kahila-Tani et al., 2019; van de Ven et al., 2016; Wilson & Tewdwr-Jones, 2019).

Community Engagement and Plan Implementation

With so many approaches to community engagement, the question emerges of whether different styles of participation influence the impact and success of plans created. Greater public participation has been shown to generate plans that include a mixture of conventional institution-based action and more community-based actions, which can enable more people to participate in plan execution, and increase the likelihood of local plans being implemented (Blair, 2004). However, support and follow-up from public officials, such as financial and technical assistance, are crucial to connect public participation and

implementation (Blair, 2004). Research has found that active, inclusive community engagement approaches create more effective responses to climate change and disaster risk management than engagement approaches that were more consultative (Baybay & Hindmarsh, 2020). However, deliberative approaches may not create long term impacts without direct connection to implementation plans (Hobson & Niemeyer, 2011). Research evaluating the impact of community engagement is overall limited; one Australian study found that due to lack of detailed documentation and evaluation of public participation, they were unable to determine whether public participation created the benefits it was assumed to (Burton & Mustelin, 2013). There is “widespread lack of clarity” in how to determine the effectiveness of engagement and identify indicators that measure its quality and impact (Head, 2007).

Climate Resilience Planning

Defining Climate Resilience

Climate mitigation, adaptation, resilience, and sustainability are inter-related concepts that respond to the climate crisis in different ways. Sustainability is often defined as maintaining conditions under which humanity and nature can support both current and future generations (US EPA, 2014). Sustainability is a broad term that unites three pillars of social, economic, and environmental well-being. While sustainability does necessitate finding ways to live within a changing climate, mitigation, adaptation, and resilience are more directly focused on responding to the threat of climate change. Mitigation seeks to address the root cause of climate change by eliminating greenhouse gas emissions, primarily by phasing out fossil fuel usage (Union of Concerned Scientists, 2022). Adaptation seeks to modify systems and practices to protect against existing and growing climate threats (City of Chicago, 2022). However, many adaptation strategies can produce greenhouse gases, such as providing air conditioning in response to higher temperatures or building flood protection systems from concrete. The term adaptive mitigation highlights the need to employ actions that provide protection from climate impacts and other local benefits (adaptive) while simultaneously reducing greenhouse gas emissions (mitigation) (Rottle, 2013).

Resilience is often conceptualized as sitting at the intersection of mitigation and adaptation (Figure 2): “successfully coping with and managing the impacts of climate change while preventing those impacts from growing worse” (Union of Concerned Scientists, 2022). Technical definitions of climate resilience focus on the ability of systems and communities to recover from increased stresses, whether they are natural disasters or social changes, and recognizes the complex interconnections between environmental and social systems (Meerow & Woodruff, 2020). This paper will utilize the term climate resilience, as a broader, more-encompassing term, but will not exclude plans that use climate adaptation, mitigation, or sustainability terminology.

Climate Resilience Plans

Historically, Climate Action Plans (CAPs) emerged as a climate mitigation tool, offering steps towards the measurement and reduction of carbon emissions in a particular jurisdiction or area. Because the United States has lacked unified national lead-



Figure 2. A simplified relationship between climate adaption, mitigation, and resilience, as defined by ClimateSF (City and County of San Francisco, n.d.)

ership on climate action, CAPs are often developed at the local level by city governments, and occasionally by counties or states. Over time, CAPs have evolved to include climate projections, vulnerability assessments, and strategies for adaptation and resilience (City of Boston, 2016).

This paper will use the term, “climate resilience plans”, to reflect an expanded realm of interrelated climate topics and encompass plans that do not prioritize mitigation strategies. Climate resilience plans (CRPs) are documents that assess the climate risks facing a specific area and offer detailed steps to adapt, improve resilience, and reduce vulnerability to those risks. Climate resilience plans bring natural environment and climate hazards together with social impacts of climate change and existing inequities. Climate hazards commonly addressed in CRPs include: coastal and rainfall flooding; extreme storms; extreme heat and cold; declining ecosystem health; wildfires; unhealthy air quality; and drought (Agnes Scott College and the City of Decatur, 2021, 2021; Chicago Metropolitan Agency for Planning, 2018, p. 2021, 2018; City of Los Angeles, 2018; City of Portland, 2022; City of San Diego, 2021; Fairfax County, 2022; The State of New Jersey, 2021). Some CRPs include climate mitigation strategies to reduce greenhouse gas emissions, such as investing in renewable energy and adopting energy efficiency standards for buildings (City of Chicago, 2022; City of Portland, 2022; City of Seattle, 2018). CRPs typically connect climate issues to social systems and questions of vulnerability, equity, and justice through topics such as affordable housing; social services; public health; land use planning; asset and infrastructure protection; energy systems; and transportation (Agnes Scott College and the City of Decatur, 2021, 2021; Chicago Metropolitan Agency for Planning, 2018, p. 2021, 2018; City of Los Angeles, 2018; City of Portland, 2022; City of San Diego, 2021; Fairfax County, 2022; The State of New Jersey, 2021).

Community Engagement for Climate Resilience Planning

Engagement Models

Climate touches down at the local level, impacting people's lives and the places they live, so community engagement is therefore a crucial element of climate resilience planning. Community engagement can help information flow between communities and decision-makers, identify solutions and interventions, and in the process build awareness, community leadership, and social cohesion (Gonzalez, 2017). Engagement practices are frequently evolving and can draw from a variety of theories and traditions, including environmental justice, community-based participatory research, and co-creation.

Environmental Justice and Climate Justice

The environmental justice (EJ) movement emerged in the later 20th century in protest of environmental harms disproportionately impacting communities of color. The Black community in Warren County, North Carolina's protest of a hazardous waste landfill is often cited as the beginning of the movement, which brought together communities fighting for racial justice and environmental protection. The EPA defines EJ as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies" (US EPA, 2015). EJ's central tenets include the need for grassroots, bottom-up community action; meaningful public participation; and procedural equity (Bullard, 1993; Kuhn, 1998). Community voices are centered in this work; "true environmental justice cannot be achieved without a vocal, informed, and empowered community expressing its vision of what its community can and should be" (Shepard, 1994). In response to EJ activism and scholarship opposing exclusionary environmental decision-making, the EPA developed the Model Plan for Public Participation in 1996. This model recommends a relationship-based approach where government officials identify key local groups and stakeholders, and hold accessible meetings that foster "an atmosphere of equal participation," where the community and the government share leadership (US EPA Office of Environmental Justice, 1996).

Climate justice emerged from the framework of environmental justice, focused on the disproportionate impacts of climate change on vulnerable populations. Hurricane Katrina was a major turning point for EJ groups to make clear connections between EJ, climate change, and vulnerability and lead the fight for a "just transition" away from fossil fuels. Climate justice approaches to adaptation center local social capital, adaptive capacity, and participatory justice through inclusion (Schlosberg & Collins, 2014). The climate justice approach is reflected in the Sandy Regional Assembly's Recovery Agenda. This agenda was created by EJ groups, community groups, and labor unions in the aftermath of Superstorm Sandy. The agenda advocated for a grassroots-based recovery, including decision-making, implementation, and accountability, and offered an itemized list of community priority adaptation projects, some of which are shown in Figure 3 (Sandy Regional Assembly, 2013).

Table 1: Adaptation/Resiliency Capital Projects for Storm Surge Vulnerable Communities	Cost Estimate	Affected areas
Reconstruct the Long Beach Boardwalk: This was completely destroyed by Sandy and generates millions in tourism revenues.	\$25,000,000 <i>Potential Sandy Recovery Appropriation Stream: First Installment of CDBG funds include \$100 in infrastructure needs in Business Recovery Zones.</i>	Long Beach, Long Island
Create Minish Park/Passaic Riverfront: Provide critical green infrastructure, open space, waterfront access, and flooding/storm surge mitigation through the creation of bulkheads, a park and wetlands.	\$5,000,000 <i>Potential Sandy Recovery Appropriation Stream: Department of the Army/Army Corps of Engineers construction funds, Phase 2.</i>	Newark, New Jersey
Repair/upgrade Passaic Valley Sewerage Commission: Address damage to equipment, labs, administration, and security buildings left by severe flooding and storm surge from Sandy resulting in the discharge of billions of gallons of untreated sewage and water into the river/bay over three weeks. This caused \$250 million in damage. FEMA has provided PVSC \$11.2 million so far to offset this loss, but they may have to borrow to cover other aspects of the project.	\$239,000,000 <i>Potential Sandy Recovery Appropriation Stream: EPA Clean Water funding through SRF.</i>	Newark, New Jersey
Creation of Newark Riverfront Park: Acquire and remediate up to 11 properties (nearly 23 acres) adjacent to the river to provide resilient waterfront access and soften the river's edge, complement park development and provide health and recreation benefits in a very under-served city. This is part of "Newark's River: A Public Access & Redevelopment Plan" & part of the City's Master Plan.	\$3,000,000 <i>Potential Sandy Recovery Appropriation Stream: CDBG.</i>	Newark, New Jersey

Figure 3. Example list of community priority projects developed under a climate justice framework (Sandy Regional Assembly, 2013)

Community-Based Participatory Research

Community-based participatory research (CBPR) is a style of community engagement that builds bridges between researchers and local communities. The process is collaborative; all participants share knowledge from their fields and participate in decision making. CPBR is intended to generate shared knowledge that can be used to design interventions, benefiting researchers and communities alike (Viswanathan et al., 2004). Most commonly applied to public health and medical research, CPBR is increasingly used in applications connecting health and environment, like air quality and urban heat. The development of low-cost sensors in recent years has led to community-based programs that monitor conditions at a highly local level. These programs create increased community awareness and arm community groups with data to advocate for themselves (Commodore et al., 2017). One example is NOAA's Heat Watch program which funds volunteer-based community science campaigns that partner a private firm with local groups to map local urban heat. This information can then be utilized in "city sustainability plans, public health practices, urban forestry, research projects, and other engagement activities" (National Integrated Heat Health Information System, n.d.). In Detroit, a different CBPR partnership also studying urban heat found that the approach strengthened the capacity of both institutional partners and the community, helped secure additional funding, and created and disseminated knowledge that will inform longer-term policy changes (Ziegler et al., 2019).

Co-creation

Co-creation is another model for public participation that focuses on collaborative, non-hierarchical design and decision-making. It emerged in the 1960s and 1970s from Scandinavian labor unions practicing cooperative design. Co-creation follows an iterative, five-stage cycle to solution design: explore, design, experiment, implement, and manage (DeLos-Ríos-White et al., 2020). The practice uses democratic processes to break down hierarchies; it “emphasizes innovation and creativity and as such it implies potential for fundamental change as regards roles, positions, and relationships between stakeholders” (Leino & Puumala, 2021). Because of its innovative approach to stakeholder relationships, which can reduce conflict and build trust, co-creation has been increasingly applied to environmental and climate change issues in cities (DeLos-Ríos-White et al., 2020). However, the process can be difficult and resource-intensive, due to the need to dedicate time and well-trained staff. Research has identified gaps between the involved co-creation of knowledge and subsequent use of knowledge to implement ideas, highlighting that state institutions must be willing to adjust their expectations and plans to align with the results of co-creation, rather than utilize the exercise simply to legitimize governance (Leino & Puumala, 2021).

Problems Observed

Despite the abundance of theoretical models for community engagement, climate resilience work has often faced backlash and a multitude of barriers to public participation in practice. Many climate resilience projects have “become a flash point for competing interests, generating their own sets of winners and losers” (Sovacool et al., 2015). One notable example is the East Side Climate Resilience project in New York. After lower Manhattan saw significant flooding during Superstorm Sandy, the city began making plans to close and rebuild a park on the East River with increased flood protection. The city spent four years co-developing a plan with the community, but that plan was replaced with little transparency or communication from city agencies (Hasan & Husiak, 2023; Helmore, 2021). This led to conflict between groups in the community; while some groups supported the city’s new plans, other activist groups collected thousands of signatures to oppose them (Herman, 2019). The opposition cited concerns over disproportionate impacts to low-income people, communities of color, and public housing residents, as well as concerns that the redevelopment being conducted in the name of climate resilience would actually spur gentrification and displacement of longtime residents, an idea known as the “green growth machine” (DuPuis & Greenberg, 2019; Helmore, 2021). Even when communities reach consensus, they often face institutional barriers to the interventions they choose to implement. On Staten Island following Superstorm Sandy, several communities organized to request buyouts of flooded properties. They needed support at both the city and state level in order to initiate buy-outs, but not all of the communities that requested buy-outs received this support and were able to move to safer areas (Koslov, 2014; Schuerman, 2014). In Alaska, indigenous island communities facing coastal flooding and erosion decided they needed to resettle, but there is no comprehensive policy or single government agency facilitating this type of managed retreat in the United States. The community members coordinated with several different agencies, navigating a complex assortment of programs and processes more focused on disaster management than future resilience, and ultimately failed to obtain funding to support relocation (Shearer, 2012).

Current Guidance

Given the challenges of community engagement in climate resilience planning, researchers have attempted to identify best practices and common problems in community engagement. The American Planning Association (APA) recommends many interventions, including that planners build relationships through ongoing engagement and that practitioners focus on eliminating barriers to reaching their target audiences (Spivak, 2019). The APA also recommends that institutions practicing community engagement commit resources for paid community organizers to work in underrepresented neighborhoods, prioritize meeting people's social welfare needs, create space to address past grievances, and avoid duplicating engagement efforts, which creates community burnout (American Planning Association, 2019). The National Association of Climate Resilience Planners published a report calling for community-driven climate resilience planning, recommending local governments improve five elements of governance: community participation infrastructure, partnerships with community-based organizations, awareness of structural racism, root-cause solutions, and inter-agency coordination (Gonzalez, 2017). Studies have raised the importance of governments or other institutions tapping into existing community networks and building relationships and "mutual adaptation over time" (Cains & Henshel, 2019; Head, 2007; Johnston, 2010). Because community engagement is personal and complicated, facilitators with skills, experience, and resources are also crucial (Ryan et al., 2020).

Common problems faced in community engagement include: a lack of implementation and evaluation plans and a focus on distributive justice, but not procedural justice. Final plans often lack detailed implementation steps, preventing them from enacting the change intended (Meerow & Woodruff, 2020). Plans can focus on the distributive justice of benefits and harms, but fail to achieve procedural justice by "engaging the right people in a meaningful way and at the right stage of the planning and decision-making process" (van den Berg & Keenan, 2019). Public participation is often a vague government commitment or goal, with little detail given to its application in practice (Burton & Mustelin, 2013). It is assumed to lead to more resilient communities, but the actual benefits are rarely measured or evaluated for improvement (Burton & Mustelin, 2013; Ryan et al., 2020; van den Berg & Keenan, 2019).

This lack of attention and documentation of how community engagement is conducted means that resilience planners lack detailed examples of how to perform community engagement in practice. Furthermore, there is little research evaluating the performance of community engagement, limiting improvements in efficacy and equity. This paper seeks to identify exemplary cases of community engagement in resilience planning and to document their practices in a detailed manner. This research will look at community engagement processes and steps taken towards plan implementation and intended resilience outcomes to understand if there is a relationship between strong engagement and plan "success". Finally, the paper will look across the examples to recommend actionable engagement practices for resilience practitioners seeking to equitably achieve resilience goals.

METHODS

Due to the lack of detailed examples of community engagement practices for climate resilience planning and their connection to plan efficacy, this paper utilizes case study analysis to explore community engagement processes more deeply. After reviewing climate resilience plans created by public entities in the United States, three were selected for case studies. The plans were chosen for their relatively detailed documentation of community engagement processes, relatively high degrees of public participation, and explicit attention to equity and justice within planning processes and outcomes. With the case studies selected, I reviewed publicly available information within the plans, supporting appendices, and related white papers to fully document how engagement was conducted.

Next, I identified members of the municipal teams leading each planning process, attempting to identify those who had been involved in engagement. These individuals were then contacted via email to request a one-hour interview. Interviewees were asked a standardized set of questions (Figure 4) as well as individualized questions to clarify details of the specific plan.

The information from document review and interviews was combined to produce the four case studies that follow. The case studies outline the context of the plan, including local issues and participants; how engagement was conducted, including activities, staff training, and relationships and trust building; how implementation has progressed, including early wins and barriers; and lastly lessons learned by practitioners through the process. Following the case study results, this paper will identify common themes and lessons across the three examples to create specific recommendations for climate resilience practitioners seeking to work with and for communities.

Process Questions	Describe your role in relation to the plan.
	At what stage in the process of creating the plan did public engagement start?
	On the City/County's side, what work was done to prepare the project team for these conversations? Did staff go through any training?
	What was done to build relationships and trust with community members and organizations?
	What, if anything, was done to share resources or create reciprocity with participants?
	What were some of the main learnings of the engagement and participation process?
	Is there anything you would have done differently?
Implementation Questions	What have been some early successes to come out of the plan?
	Thinking about the actions and strategies listed, where has the most implementation been accomplished?
	What do you see as the barriers to the plans' implementation?
	How would you rate the city/county's commitment to the plan? Have resources been allocated to move actions forward?
	Was there anything proposed by the plan that no longer seems feasible?
	Do you feel that the way engagement was conducted has influenced the plan's outcomes or implementation?

Figure 4. Practitioner Interview Questions

RESULTS

The case studies that follow examine four climate resilience plans in different parts of the United States. These plans were chosen because they documented relatively strong community engagement process that centered equity and justice. The selected plans are:

1. King County, Washington's Strategic Climate Action Plan, 2020
2. Providence, Rhode Island's Climate Justice Plan, 2019
3. Dallas, Texas' Comprehensive Environmental and Climate Action Plan, 2020
4. Portland and South Portland, Maine's One Climate Future Plan, 2021

Each case study includes the following sections:

- Context- explains the local context in which the climate resilience plans were created
- Community Engagement Process- details steps taken to engage with communities: the who, what, and when
- Principles and Practices- explains specific practices that put equity and justice commitments into practice
- Implementation- explores how well the plan's strategies have been executed since its adoption
- Takeaways and Lessons- identifies key learnings inspired by the plan's successes

KING COUNTY 2020 Strategic Climate Action Plan



May 2021



King County

CLIMATE ACTION
Clean Future. Strong Communities.

King County Case Study

Context

King County, Washington includes the city of Seattle and surrounding areas, with a population of 2.3 million people. In 2020, the county released the Strategic Climate Action Plan (SCAP), a five-year outlining the county's climate management plans. The SCAP is made up of three main sections:

Section 1: Reducing Greenhouse Gas Emissions

Section 2: Sustainable & Resilient Frontline Communities

Section 3: Preparing for Climate Change

Together, the sections commit the county to reducing emissions to mitigate climate change, preparing for climate change impacts, and working equitably with communities to address the disparate impacts faced by frontline communities. The 2020 SCAP follows the 2015 plan of the same name, expanding the county's commitments, and focusing more deeply on equitable engagement and co-development. Section 2, Sustainable & Resilient Frontline Communities was new to the 2020 plan, reflecting this deeper commitment to frontline communities.

Community Engagement Process

Community engagement predated the planning process by two years. The county hired a Climate Engagement Specialist who examined climate change impact and socioeconomic data and began to cultivate relationships in impacted communities, identifying organizations interested in climate work. These relationships developed and came together to form the Climate Equity Task Force (CETF), a group of 22 community leaders. Over a year and a half, the CETF themselves led development of the Sustainable & Resilient Frontline Communities section of the SCAP. Even after the release of the SCAP, the taskforce continues to meet to provide inform implementation of the plan (described under "Implementation" below).

In addition to the deeply involved CETF, King County offered a wide spectrum of public participation opportunities to reach different residents. They conducted youth workshops and public workshops in across the county, connecting with 100 and 250 residents respectively. They also joined county comprehensive plan meetings to offer climate information, collect feedback, and create linkages between the plans. The County offered community presentations and workshops on request to interested groups, reaching 45 groups and 900 people. They created an email communication system, website, and digital public input survey, which received 650 comments from 200 respondents. The county also held topic-based meetings to learn from local subject matter experts. Lastly, the county sought interdepartmental linkages by engaging county employees through lunch and learns and open houses. An advisory committee of county employees also provided technical support to the Climate Equity Task Force. The SCAP provides detailed information on these community engagement strategies, members of the CETF and other advisory groups, and summarizes the types of feedback that were heard through these arenas.

Principles and Practices

Engagement work was guided by principles of equity, justice, and community ownership. The county's Climate Engagement Specialist had a professional background in environmental justice and facilitated engagement and co-creation of the Sustainable & Resilient Frontline Communities section of the plan. The county did not provide structured trainings to staff members, but the Climate Engagement Specialist modeled deep partnership and embedded equity into processes. They created alignment between the CETF, plan sections, and other members of county staff. Engagement was guided by the spectrum of Community Engagement to Ownership adapted from Rosa González of Facilitating Power as well as the King County Community Engagement Guide. With these principles, the county explicitly acknowledges that they are not always the right body to lead work and recognizes the importance of uplifting and supporting community-led initiatives. Within the CETF, working practices sought to embed equity within the group's relationships and practices. Meeting locations were rotated to ease travel burdens and members were compensated for their time. Importantly, members sought to develop relationships that brought both personal and professional experiences to the table. During participation opportunities that engaged the broader public, attention was paid to language access, ensuring that educational materials were available in languages reflecting community composition, and meeting locations were chosen for accessibility.

Implementation

King County's Strategic Climate Action Plan outlined an ambitious set of actions across all three sections of the plan. In 2023, they released a progress report showing that of 242 planned actions, 169 were on track or completed, 66 are underway with some risks towards completion, and 5 were in need of serious course corrections (Figure 5). This summary focuses on Section 2, Sustainable & Resilient Frontline Communities, which was the most directly informed by communities, co-created by the Climate Equity Task Force and the county. The plan lays out eight focus areas for work in the following five years:

1. Community leadership and community-driven policy making
2. Community capacity development
3. Equitable green jobs and pathways
4. Community health and emergency preparedness
5. Food systems and security
6. Housing security and anti-displacement
7. Energy justice and utilities
8. Transportation access and equity

Section 1: Reducing Greenhouse Gas Emissions

GHG Overall

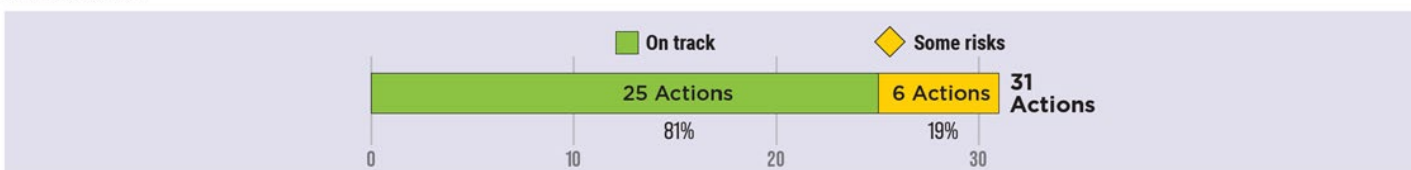


By GHG Focus Area



Section 2: Sustainable & Resilient Frontline Communities

SRFC Overall

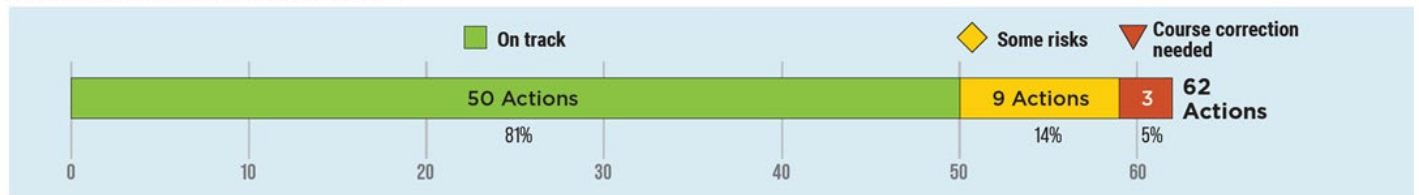


By SRFC Focus Area



Section 3: Preparing for Climate Change

Preparing for Climate Change Overall



Preparing for Climate Change by Focus Area

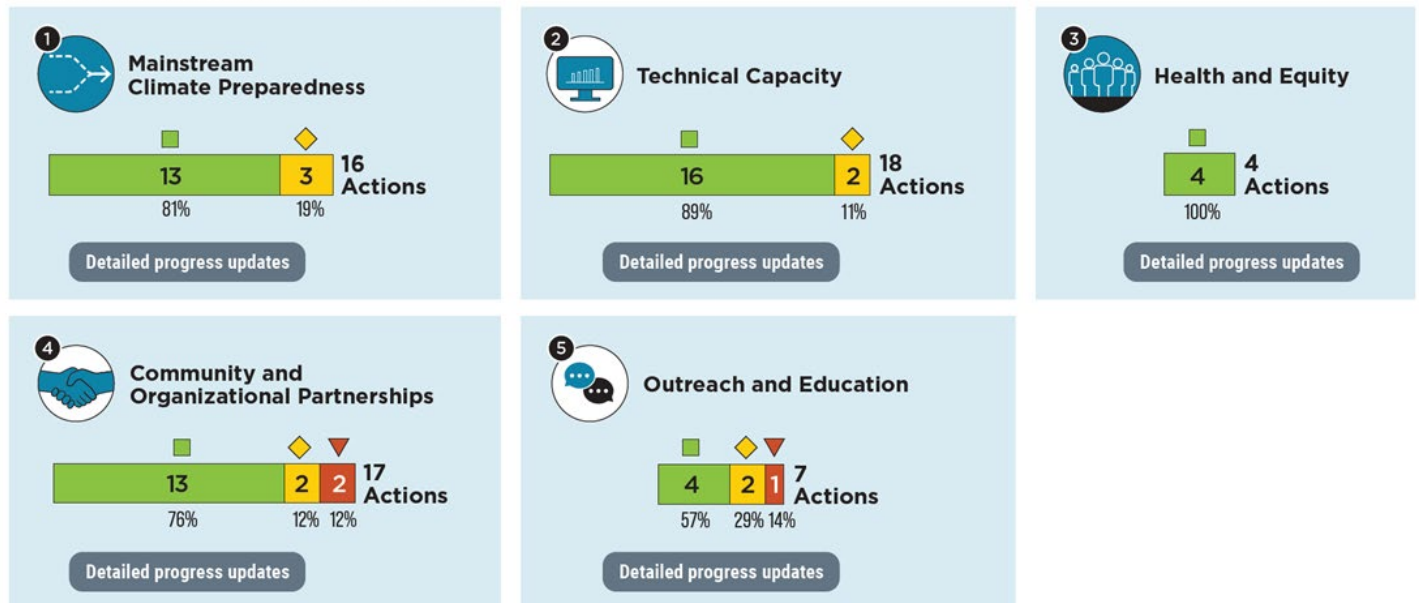


Figure 5. Strategic Climate Action Plan progress in 2023

In one major step towards meeting their commitments in these focus areas, the county has created a \$20 million Climate Equity Capital Pool. The fund awards money to frontline community organizations to support projects that increase climate resilient infrastructure and green job pathways. Recipients were selected by a team of county staff and members of the Climate Equity Community Task Force. The county has also hired a Green Jobs Program Manager to increase internal capacity to develop work in this focus area. They have increased the budget of the team implementing the Sustainable & Resilient Frontline Communities section, allowing them to hire an additional team member to grow capacity. Additional projects that are underway in the county following the SCAP include: building a community center in an unincorporated area of the county and climate retrofits at a youth home.

The county has demonstrated commitment to implementing the SCAP, including clear updates on progress, and financial investments. However, staff capacity remains a major barrier, as well as internal coordination with county staff in other departments responsible for implementing the plan. Of the eight focus areas in section 2, Housing Security and Anti-Displacement and Energy Justice and Utilities have proved to be the most difficult to reach implementation. Funding, staff time, and internal alignment between the Department of Community and Human Services and the Climate Team are needed to continue to build out partnerships and accomplishments in these areas.

Takeaways and Lessons

Ongoing engagement

Relationships between community leaders and County staff extend in both directions beyond the planning process itself. A dedicated staff member led relationship building for two years prior to planning, and these relationships made it possible to create a task force that owned and led planning work. Relationships have continued beyond the publication of the plan, with the task force of community leaders continuing to share decision-making power with the county on allocation of a \$20 million dollar fund.

Language access

Language access was prioritized in engagement and has continued to be prioritized in action implementation. In-language information is now provided for public transportation service updates during extreme weather, heat and wildfire smoke safety communications, and climate-related education and outreach. Several of these communications are available in 13-17 different languages to reach multiple language communities.

Inside/Outside Organizing

The SCAP planning process engaged both “inside” government employees across departments and “outside” members of communities and organizations. This approach has created internal and external buy-in, supporting both the adoption of an ambitious plan and its implementation. When the SCAP went to council, members of the CETF, as “outsiders”, testified and offered public comment supporting the plan, which passed successfully. The SCAP project team also worked to identify county staff members doing related work across different departments. These “inside” partners have helped build an inter-sectional approach to implementation by championing climate connections, building relationships, and influencing leadership of other departments.

Education

Education has been a foundational part of engagement. When building relationships with communities, the county has taken on an educational role, identifying important information and data to share, creating materials, translating materials, and hosting workshops. Within county government, education is also crucial to implementing interdepartmental initiatives. One interviewee stated that it was important to make clear the intersections and connections between climate work and other facets of county governance, like housing. They have found success in framing climate resilience work as not the only pressing issue, but one that heightens risk for other social issues.



Fall 2019

The City of Providence's **CLIMATE JUSTICE PLAN**

Creating an equitable, low-carbon, and climate resilient future.



Providence Case Study

Context

Providence is a small city of 190 thousand people in Rhode Island. In 2019, the city released its Climate Justice Plan, with the goal of “creating an equitable, low-carbon, and climate resilient future.” The plan followed a 2014 sustainability plan released by the city and sought to better incorporate equity into the process and content of the plan. The Climate Justice Plan was co-created by the city’s Office of Sustainability and the Racial and Environmental Justice Committee (REJC), a group representing low-income communities and communities of color.

Community Engagement Process

Community engagement predated the planning process by several years. The city received grant funding to support incorporating equity into their sustainability work, which led them to pursue relationships with community leaders and organizations prior to the decision to create the Climate Justice Plan. In the early days of relationship building, the city hosted training workshops on anti-racism and environmental justice led by the People’s Institute of Survival and Beyond. City staff (including the mayor) and community members attended to build shared understandings of equity, racism, and climate justice. This helped demonstrate to community members that the city was invested in working together towards holistic solutions targeting root causes of injustice. The Racial and Environmental Justice Committee (REJC) formed in 2017, creating an independent body of community leaders intended to co-create equitable environment policy and plans with local government. Leaders were identified both through existing relationships held by city staff and consultants as well as through an open call to residents. Following the open call, the city hosted a meeting with all applicants to discuss expectations and the specific perspectives that should be represented through committee seats, including seats for environmental justice, youth, and climate impacted neighborhoods. The REJC and the City then created the Just Providence Framework, a set of principles supporting a racially equitable and just Providence that the City formally adopted.

With the REJC established, the full project team for the Climate Justice plan included the committee, members of city staff, a consultant team, and an external facilitator. To build community capacity, the project team created the Energy Democracy Community Leaders program, training 10 frontline community members on environmental justice, energy systems, and energy democracy. REJC members and community leaders conducted public meetings and conducted over 40 interviews with members of frontline communities. The city also conducted an open survey of city residents that collected 150 responses. They published a comprehensive summary of the comments, as well as demographics of respondents, who were predominantly white and homeowners. These forms of input were combined to design solutions that became the Climate Justice plan.

Principles and Practices

The Just Providence Framework created by the REJC and the city was foundational to the Climate Justice Plan. This framework includes 11 principles designed to move the city towards racial equity and a Just Transition, including: upholding self-determination, co-creating and co-leading governance with frontline communities, and valuing education, among others. Similar to King County, Providence's Climate Justice Plan also centers around the spectrum of community engagement to ownership developed by Rosa González (Figure 6). This framework is designed to maximize community participation by building capacity for community leadership and collaboration with government. In practice, these principles were put into practice through the deep relationship building done with the REJC, explicit prioritization of frontline perspectives, and training members of city government on these topics. Additionally, REJC members were paid a stipend as compensation for the time and expertise they contributed to the development of the plan.

Stance towards community	0 IGNORE	1 INFORM	2 CONSULT	3 INVOLVE	4 COLLABORATE	5 DEFER TO
Impact	<i>Marginalization</i>	<i>Placation</i>	<i>Tokenization</i>	<i>Voice</i>	<i>Delegated Power</i>	<i>Community Ownership</i>
Community Engagement Goals	Deny access to decision-making processes	Provide the community with relevant information	Gather input from the community	Ensure community needs and assets are integrated into process and inform planning	Ensure community capacity to play a leadership role in implementation of decisions	Foster democratic participation and equity by placing full decision-making in the hands of the community; bridge divide between community and governance
Message to Community	<i>"Your voice, needs, and interests do not matter"</i>	<i>"We will keep you informed"</i>	<i>"We care what you think"</i>	<i>"You are making us think (and therefore act) differently about the issue"</i>	<i>"Your leadership and expertise are critical to how we address the issue"</i>	<i>"It's time to unlock collective power and capacity for transformative solutions"</i>
Activities	Closed-Door Meetings Misinformation Systematic Disenfranchisement Voter Suppression	Fact Sheets Open Houses Presentations Billboards Videos	Public Comment Focus Groups Community Forums Surveys	Community Organizing & Advocacy House Meetings Interactive Workshops Polling Community Forums	MOUs with Community-Based Organizations Community Organizing Citizen Advisory Committees Open Planning Forums with Citizen Polling	Community-Driven Planning Consensus Building Participatory Action Research Participatory Budgeting Cooperatives

Figure 6. Spectrum of Community Engagement to Ownership, developed by Rosa González of Facilitating Power, with the Movement Strategy Center

Implementation

The Climate Justice plan includes 55 strategies across 7 focus areas:

1. Lead by Example (6 actions)
2. Collaborative Governance and Accountability (9 strategies)
3. Housing and Buildings (14 strategies)
4. Community Health (10 strategies)
5. Local and Regenerative Economy (6 strategies)
6. Clean Energy (3 strategies)
7. Transportation (7 strategies)

The city has not published a report on Climate Justice Plan implementation, so it is not possible to determine overall progress.

However, several strategies have seen movement in the years since the plan's release. One area of successful implementation has been a community choice aggregation program, one of the strategies included in the Clean Energy focus area. This program, in which the city procures energy from providers, enabled them to negotiate for more renewable energy and lower rates, achieving the dual goals of decreasing emissions while ensuring energy affordability. The city has recently hired a consultant to identify opportunities to advance the plan through the city's zoning code. Zoning-related strategies are included in several focus areas of the plan, including Housing and Buildings to reduce displacement and Community Health to address the health impacts of industrial land uses. The city is also working to create resilience hubs, community facilities that offer resources and space to gather before and during emergencies, which is one of the goals of the Community Health focus area. The first hub opened this year in a low-income, majority-Hispanic neighborhood. In the Collaborative Governance and Accountability focus area, the Environmental and Sustainability Task Force, a mayoral and city council appointed advisory group, has added two seats each for environmental justice and youth experts. Finally, in the Lead by Example focus area, Providence recently released a tree equity plan to support the strategy of expanding and improving green spaces by prioritizing tree plantings for resident benefits.

Takeaways and Lessons

Equity and Justice Expertise

A third-party facilitator with expertise in racial justice work was crucial to the engagement process. Difficult conversations and moments occurred throughout the planning process and the facilitator was able to help the group work through the conversations while balancing complex power dynamics. External trainings on anti-racism and environmental justice led by the People's Institute of Survival and Beyond also increased the city staff's sensitivity and ability to engage with frontline communities.

Compensation

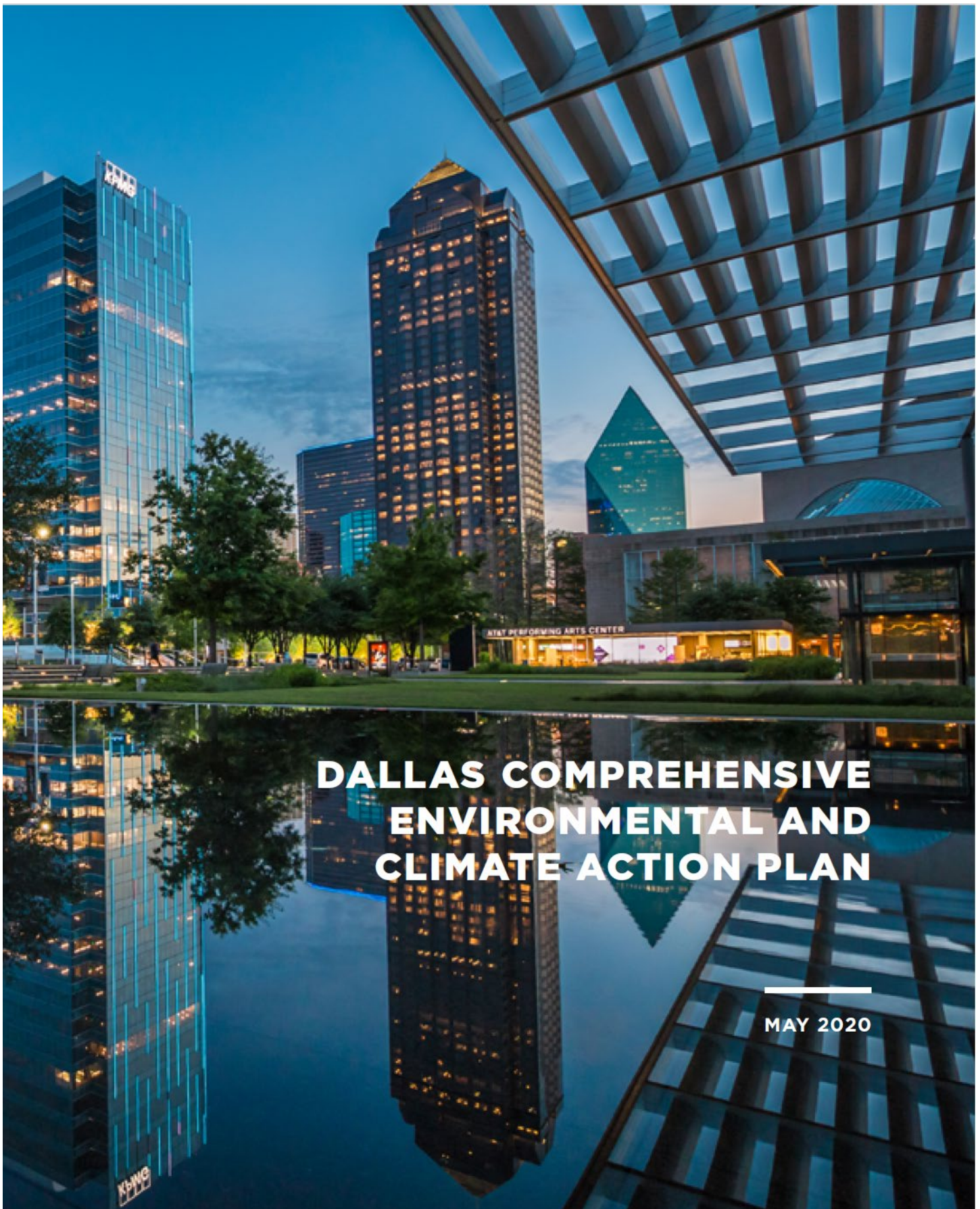
Member of the Racial and Environmental Justice Committee were offered stipends for their time. This was made possible by the grant the city received. The stipends demonstrated that the city valued peoples' expertise and time and made it possible for people to participate who otherwise could not have.

Stepping back for community leadership

Part of the planning process' success was due to the city staff's willingness to step back from a leadership role and support the leadership of community members on the REJC. An interviewee stated that when members of the REJC hosted public meetings they were able to bring in communities and perspectives that the city struggled to include in their own public meetings.

Outcomes are tied to participants

The Climate Justice Plan, released in 2019, was unique relative to other climate action plans at that time, because of its attention to housing affordability, energy affordability, and the public health impacts of emissions. The fact that these issues were included was a direct result of engagement that prioritized the voices of frontline communities.



DALLAS COMPREHENSIVE ENVIRONMENTAL AND CLIMATE ACTION PLAN

MAY 2020

Dallas Case Study

Context

Dallas, a city of 1.3 million in northern Texas, released the Comprehensive Environmental and Climate Action Plan (CECAP) in 2020. This plan was initiated by City Council, who passed a resolution in 2019 directing city staff to create an actionable climate plan that built upon existing planning work, linked to national and international climate protocols, and included a strong community engagement effort. Dallas' Office of Environmental Quality & Sustainability (OEQS) and a team of consultants created the plan and led community engagement efforts. The plan is informed by a 2015 greenhouse gas inventory created by the city and builds on the 2018 Resilient Dallas Plan, which set goals for building community resilience to social and environmental stressors. The CECAP seeks to pair emissions reductions with improving residents' quality of life, while centering justice and prioritizing communities most in need.

Community Engagement Process

Community engagement prompted the CECAP's development; during yearly city budget townhalls, residents asked what Dallas was doing in response to climate change, leading City Council to pass a resolution directing staff to create the plan. The community engagement process for the CECAP kicked off at the beginning of plan development, informing vision and goal setting, continuing throughout action development and plan finalization (Figure 7).

CECAP DEVELOPMENT + ENGAGEMENT HIGHLIGHTS

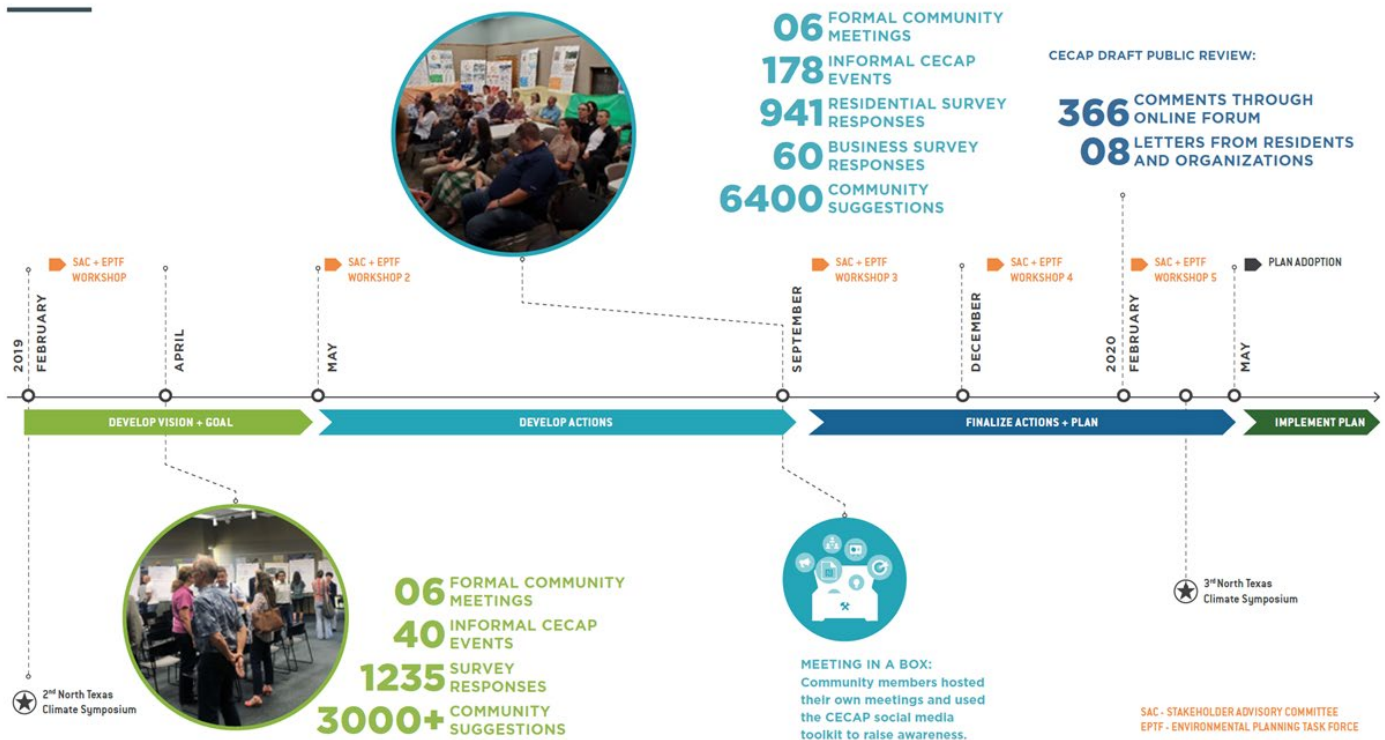


Figure 7. Community engagement throughout the CECAP planning process

The city created two advisory groups that influenced each stage of the planning process. The advisory groups included the Stakeholder Advisory Committee, made up of individuals from organizations representing public health, education, environmental justice, housing, business, and other related perspectives. A sub-committee of this group helped direct engagement methods and materials to improve public participation. The other advisory group, the Environmental Planning Task Force, was made up of city staff from 20 departments involved in implementing actions. Both groups held five workshops during the 16-month planning process.

The city also provided opportunities for broad public participation beyond advisory groups. These included public meetings, meetings on request with community groups, surveys, and digital outreach including social media campaigns and a website. Over 6,000 residents participated in meetings, generating over 9,000 comments for the city. Comments were especially used by the city to narrow their focus and select 97 final actions from a larger list of ideas generated.

Community engagement has continued beyond the planning process and into plan implementation. Since the release of the CECAP, the city has released an Equity Impact Assessment tool identifying 22 vulnerable zip codes. In their continuing outreach and education for the CECAP, the city's OEQS prioritizes engagement in these zip codes, with the goal of reaching each area monthly through events like tabling at resource fairs or local school events. The two advisory committees have evolved into long term bodies: the Environmental Commission and Leading Environmental Action Forward (LEAF). The Environmental Commission is a group of community advocates and subject matter experts with seats appointed by city leaders. The commission provides recommendations on all measures related to the CECAP before they go before City Council. Members of the commission also serve as intermediaries between city government and their communities, conducting outreach and relaying information. LEAF is made up of 18 city departments who create yearly implementation workplans with milestones tied to CECAP actions and meet quarterly to provide progress updates.

Principles and Practices

The CECAP aims to center justice by pursuing actions aimed to improve environmental quality and environmental justice. Equity was also a central principle of the planning process. Engagement sought out communities who have not typically been included in planning processes by prioritizing outreach in southern and western Dallas neighborhoods. However, the process for determining this focus is unclear. Geographic origins of public comments were tracked to ensure that every zip code in the city was represented. The project team also attempted to reach people who may not be able to attend public meetings through a variety of means: live-streaming meetings, using social media, attending community events, and partnering with community organizations. They continue to prioritize engagement of more vulnerable communities, relying on the city's Equity Impact Assessment tool to identify communities by zip code.

Implementation

Since the CECAP's release, the Office of Environmental Quality and Sustainability (OEQS) has created yearly implementation plans and progress reports to update city government and the public on how the plan's goals are advancing. The CECAP includes 97 actions; city has set goals of activating 75% of these actions each year and completing 92% of the yearly milestones they commit to in each implementation plan. The city has one OEQS staff member responsible for tracking and reporting on progress as well as supporting implementation projects, although 18 city departments collaborate on various actions. In 2023, the City selected 73 of the 97 CECAP actions to work on, dividing these into 202 discrete milestones. All of these milestones were completed or started by the end of the year (Figure 8). However, these milestones have varying degrees of specificity and are not always quantitative, measurable goals. For example, Goal 8's milestones include "continue to support Air North Texas Campaign and expand where feasible" and "make data from air monitoring stations available to the public" (Figure 9).

	Complete	Ongoing in FY24	In Progress	Not Started	Total 2023 Milestones
Goal 1: Dallas Buildings Are Energy Efficient And Climate Resilient.	14	10	2	0	26
Goal 2: Dallas Generates And Uses Renewable, Reliable, And Affordable Energy.	4	12	1	0	17
Goal 3: Dallas' Communities Have Access To Sustainable, Affordable, Transportation Options.	3	21	4	0	28
Goal 4: Dallas Is A Zero-Waste Community.	1	17	1	0	19
Goal 5: Dallas Protects Its Water Resources And Its Communities From Flooding And Drought.	0	46	0	0	46
Goal 6: Dallas Protects And Enhances Its Ecosystems, Trees, And Greenspaces That In Turn Improve Public Health.	3	35	1	0	39
Goal 7: All Dallas' Communities Have Access To Healthy, Local Food.	5	9	0	0	14
Goal 8: All Dallas' Communities Breathe Clean Air.	4	8	1	0	13

Figure 8. Progress on FY23 implementation milestones for each of the CECAP's eight high-level goals.

Status	Dept	Milestone
AQ1: Work with the Texas Commission on Environmental Quality to install additional air quality monitoring stations across the city.		
Complete	OEQS	Make data from air monitoring stations available to the public (Ongoing)
Complete	OEQS	Maintain regulatory air monitoring and sampling programs in coordination with TCEQ (Ongoing)
AQ2: Partner with nonprofits and schools to develop and implement non-regulatory monitors in neighborhoods.		
Complete	OEQS	Administer two new grants for air quality monitoring, include efforts to coordinate neighborhood communication, and efforts to partner with public health experts to develop and implement appropriate interventions (Ongoing)
Complete	OEQS	Use resulting neighborhood level data to track progress for air quality improvement (Ongoing)
Complete	OEQS	Implement Community outreach and engagement in Racial Equity Opportunity Zones to attain community concerns and ideas concerning local air quality monitoring
Complete	OEQS	Convene regional air quality monitoring summit with local entities implementing air quality monitoring programs to assess state of the science, and opportunities for data sharing
AQ3: Continue to support and expand on the Air North Texas campaign to raise public awareness and improve air quality.		
Complete	OEQS	Continue to support Air North Texas Campaign and expand where feasible (Ongoing)
Complete	OEQS	Work with partners to reduce illegal commercial truck parking and idling in historically disadvantaged communities

Figure 9. FY23 milestone table for Goal 8: All Dallas' Communities Breathe Clean Air. (City of Dallas, 2023)

Beyond meeting milestones, the city has started several programs to implement CECAP goals. In February 2023, they launched Whole Home Dallas, an online resource hub for residents to learn about energy efficiency and other retrofits. Dallas also launched Green Jobs Skills, a program that provides free training on weatherization and energy efficiency upgrades to general contractors and tradespeople. Both programs are part of Dallas' work towards Goal 1 of the CECAP, Dallas Buildings are Energy- Efficient and Climate Resilient. On Goal 8: All Dallas' Communities Breathe Clean Air, Dallas has started a Community Air Management Program to inform residents and policy makers about neighborhood-level air quality. The program is installing sensors at locations informed by community input and provides live data on a digital dashboard.

Funding remains a barrier, since CECAP actions must compete with other city priorities for funding, but an increasing number of federal grants has helped fill gaps. The city is working with Dallas County to apply for the EPA's Solar for All grant, which is designed to help low-income households access solar. The city also worked with the North Central Texas Council of Governments to win the DOT's Charging and Fueling Infrastructure Grant to install electric vehicle charging infrastructure across the region. At the moment, Dallas has one OEQS staff member responsible for tracking and supporting plan implementation, but they are restructuring internally to relocate two urban agriculture coordinators and two air quality coordinators on the team, bringing the CECAP implementation team to five.

Takeaways and Lessons

Growing momentum among residents

Initiated by city government in response to public comments, the CECAP is an example of how growing awareness of climate change and climate impacts can drive local government action. One interviewee expressed surprise at how engaged residents are and believes that the conversation about climate change and need for climate resiliency has changed dramatically in recent years, with greater acceptance and a less negative perception of these topics amongst the public.

Language Access

Each of the case studies included here raise the importance of language access and translated documents and materials into languages spoken by residents. Dallas' team also raised the issue of language interpretation. The city's Office of Equity and Inclusion has created a language access map dashboard showing the prevalence of different languages spoken at the census tract and zip code level. This map informs the languages for which interpretation services are offered at local public meetings to ensure that language is not a barrier for anyone wishing to participate.



ONE CLIMATE FUTURE

**Charting a Course *for*
Portland and South Portland**



CLIMATE ACTION AND ADAPTATION PLAN
• 2020 • PORTLAND AND SOUTH PORTLAND

Portland Case Study

Context

In early 2021, the cities of Portland and South Portland, Maine released the One Climate Future joint plan. Although Portland is the largest city in Maine, together the two coastal cities represent just under 100 thousand residents. One Climate Future (OCF) “charts a course towards a low-carbon, thriving, and inclusive future” for the cities. The plan was created by the Sustainability Offices of the two cities—at the time a team of four—with support from a consultant team, although the city staff led community engagement efforts themselves. The plan is grounded in two earlier joint efforts from the cities: a 2017 greenhouse gas inventory and a 2019 vulnerability assessment.

Community Engagement Process

Community engagement began early in the OCF’s development and continued throughout the 18-month process (Figure 10). The cities employed a diverse number of strategies to bring in community voices and reach as many residents as possible:

- Volunteer team- 57 community volunteers received training on climate communications and engaged their own communities as ambassadors of the OCF
- Street team- over one summer, six young members of the community were paid to communicate with the public and collect feedback through community events and surveys
- Climate Planning Process Committee- a group of community members appointed by City Council provided feedback during four workshops at different stages in the plan’s development
- Lunch & Learns and workshop- in person and digital workshops offered community members more in depth information about the plan and helped the cities refine plan strategies to fit people’s lived experiences
- Presentations- the cities offered presentations to any local organization that was interested, from political parties to groups serving recent immigrants
- Tabling at community events
- Surveys- the cities launched three surveys throughout the planning process. The surveys were available in four languages and sought to capture concerns, existing community action, barriers to action, and, finally, feedback on the proposed strategies to be included in the plan
- Meeting in a box- kits of materials enabled groups to host their own engagement workshops and report takeaways back to the city
- Digital outreach- The cities used social media, a website, and a digital newsletter to provide updates and education to the public

In total, the cities participated in over 100 community events and received 1,600 survey responses.



Figure 10. Diagram of One Climate Future's engagement process

Principles and Practices

The OCF project team had three goals for engagement: creating an equitable process that gave all residents a voice, building local capacity, and sparking ongoing climate conversations to build momentum. The cities explicitly worked to build relationships with organizations serving low-income and immigrant groups and translated educational materials and surveys to expand their reach. By design, the project team intended the OCF to be a people-oriented plan focused on creating a vibrant place to live more so than infrastructure. Finally, the project team was committed to investing time and resources in the engagement process, rather than prioritizing speed of the final product. Team members spent time on weekends and evenings to attend events that would bring the planning process to more people.

Implementation

The Once Climate Future plan commits Portland and South Portland to implementing 68 strategies across four focus areas: Buildings and Energy, Waste Reduction, Transportation and Land Use, and Climate Resilience. The cities have developed a website for One Climate Future with a digital dashboard showing progress implementing strategies in both cities (Figure 12). In the three years since the plan's release, significant progress has been made, with the majority of the strategies in progress (Figure 11). However, relatively few have been completely implemented, and two strategies have been tabled or repealed by City Council in South Portland, indicating a lack of political consensus with the plan.

The cities have made the most progress in the Buildings and Energy focus area. Both cities have adopted the state’s most rigorous building energy code. Energy Benchmarking Ordinance. Both cities have started “Electrify Everything!” programs that offer incentives and education around residential energy efficiency and electrification. Portland’s Planning Department is working to create three climate resilience overlay zones: one for coastal resilience that adds building regulations for areas vulnerable to inundation, and two citywide zones for heat and stormwater management. This zoning is close to being finished and currently in the public comment period.

		Completed/ In Action	In Progress	Not Started	Tabled	Total Strat- egies
Buildings and Energy	Portland	2	14	8	0	24
	South Portland	2	14	7	1	24
Waste Reduction	Portland	0	5	3	0	8
	South Portland	0	5	3	1	9
Transportation and Land Use	Portland	0	15	3	0	18
	South Portland	1	10	5	0	16
Climate Resilience	Portland	0	16	1	0	17
	South Portland	1	14	2	0	17

Figure 11. Progress implementing OCF strategies in December 2023.

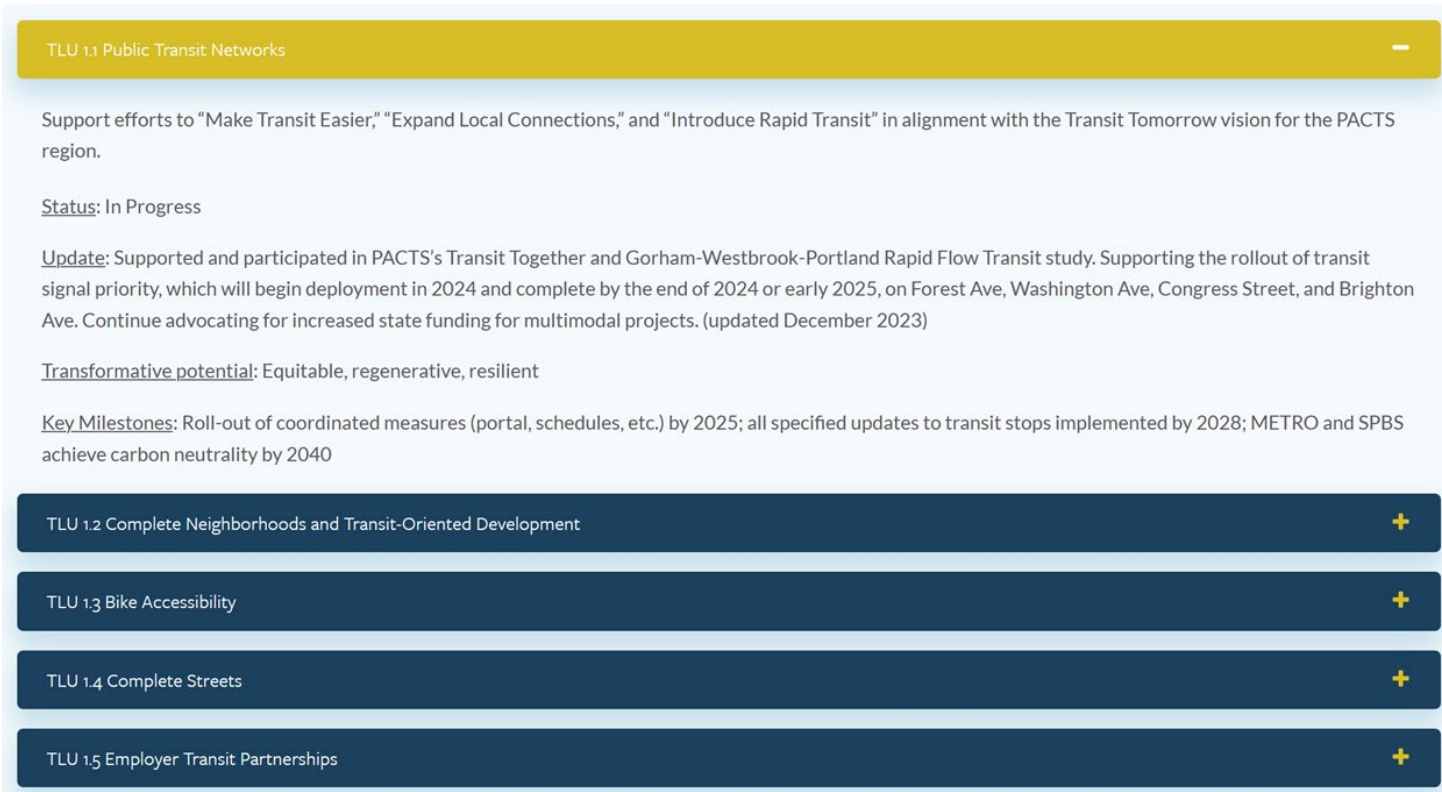


Figure 12. Digital progress dashboard for Transportation and Land Use strategies

The extensive engagement and outreach done in the planning process, combined with the smaller city size, means that there is a high degree of awareness of the plan in Portland. An interviewee stated that residents regularly attend City Council meetings pushing the city to consider the plan throughout other policies, keeping it a priority. Portland's Sustainability Office has grown to three full-time staff and an AmeriCorps staff member. Funding remains a barrier to implementation, but the office has been able to pursue grants to support projects.

Takeaways and Lessons

Diversified engagement strategies

The two cities took a broad and diversified approach to community engagement, employing the most number of strategies of any of the plans. There were numerous types of opportunities for residents to get involved with the planning process, from quick touch-points tabling at community events, to more involved workshops and volunteer opportunities. As seen in Figure 10, the project team attended as many community events as possible, from faith-based gatherings to school meetings and farmers markets. This approach helped promote citywide awareness of the initiative and political buy-in.

Transparency and documentation

Portland and South Portland's plan thoroughly documented the process behind One Climate Future. The plan details the engagement goals, strategies, timeline, and lists the individuals involved in developing it. It also summarizes survey results and links to places to stay informed, including a community newsletter, social media, and a website. The One Climate Future website offers educational resources and how-to's, factsheets in multiple languages, upcoming engagement events. Both cities have digital dashboards with progress updates on each strategy from the plan. This thorough documentation of process, educational resource sharing, and progress updates increases transparency and allows the public to stay informed and connected.

DISCUSSION

The Spectrum of Community Engagement to Ownership was a guiding concept for the plans in King County and Providence and can help assess the practices employed in each of the four plans (Figure 6). King County and Providence achieved much closer to the highest two levels of “collaborate” and “defer to”, with groups of community leaders directly determining plan focus areas, actions, and implementation practices. In these plans, local governments collaborated with community members and organizations, prioritizing those representing frontline and environmental justice communities. Both King County and Providence provided stipends to participants, trainings, educational workshops, and other forms of capacity building. King County created a \$20 million fund to support community organizations pursuing their own climate resilience projects. On the other hand, Dallas and Portland were not as close to community leadership but ran successful community engagement processes that connected broadly with communities. Operating closer to the “consult” and “involve” levels of the spectrum, they prioritized equitable outreach and invested significant resources in reaching residents through a variety of approaches, including workshops, community meetings, and surveys. King County supplemented their approach with similar methods to reach residents beyond those represented by frontline community leaders. Providence employed some supplemental methods, including a survey, but reached few residents and those who did respond were predominantly white homeowners.

Stance towards community	0 IGNORE	1 INFORM	2 CONSULT	3 INVOLVE	4 COLLABORATE	5 DEFER TO
Impact	Marginalization	Placation	Tokenization	Voice	Delegated Power	Community Ownership
Community Engagement Goals	Deny access to decision-making processes	Provide the community with relevant information	Gather input from the community	Ensure community needs and assets are integrated into process and inform planning	Ensure community capacity to play a leadership role in implementation of decisions	Foster democratic participation and equity by placing full decision-making in the hands of the community; bridge divide between community and governance
Message to Community	<i>“Your voice, needs, and interests do not matter”</i>	<i>“We will keep you informed”</i>	<i>“We care what you think”</i>	<i>“You are making us think (and therefore act) differently about the issue”</i>	<i>“Your leadership and expertise are critical to how we address the issue”</i>	<i>“It’s time to unlock collective power and capacity for transformative solutions”</i>
Activities	Closed-Door Meetings Misinformation Systematic Disenfranchisement Voter Suppression	Fact Sheets Open Houses Presentations Billboards Videos	Public Comment Focus Groups Community Forums Surveys	Community Organizing & Advocacy House Meetings Interactive Workshops Polling Community Forums	MOUs with Community-Based Organizations Community Organizing Citizen Advisory Committees Open Planning Forums with Citizen Polling	Community-Driven Planning Consensus Building Participatory Action Research Participatory Budgeting Cooperatives

Figure 6. Spectrum of Community Engagement to Ownership, developed by Rosa González of Facilitating Power, with the Movement Strategy Center

Each of the case studies continued engagement beyond the release of their climate resilience plan. In King County, Providence, and Dallas, the groups of community leaders who informed the plan have continued to meet and evolve, bringing their expertise and perspectives to influence how the plan is implemented. Portland and Dallas continue to host and attend events to share information about the plan with residents and encourage individual action. Several cases mentioned the importance of existing relationships that members of the project team brought to the table. In Portland, the Sustainability Offices chose to lead engagement, rather than their consultant team, because of their existing knowledge of the community and relationships. In Providence, the supporting consultant team had relationships with community groups and was able to bring them into the Racial & Environmental Justice Committee. Expertise with racial and environmental justice practice was also crucial to the success. Providence hired external educators to conduct training sessions and facilitators to lead project meetings, while King County was led by an internal staff member with deep environmental justice experience.

Due to the limited sample size and differences in reporting, it is not possible to connect the engagement practices to plan implementation quantitatively. To do so would require cities to release more standardized progress reports sharing the number of milestones achieved in set periods since the adoption of a plan. Milestones would need to be carefully defined to prevent overly vague milestones. If a large enough number of cities participated in a unified progress reporting system, it would be possible to examine the influence of different engagement strategies on milestones achieved. A scorecard could be developed to rate the strength of engagement practices in each city, in order to determine if stronger engagement does indeed result in more successful plans. Anecdotally, however, each of the interviewed experts believed the engagement methodologies strongly influenced implementation of climate resilience plans. The plans closer to community ownership stressed the influence this high level of engagement had on the intended outcomes of the plan, indicating that plan priorities reflect the perspectives of those leading the process. The King County and Providence plans included greater focus on housing affordability and displacement, energy affordability, green career pathways, and health impacts. This alignment of plan goals with actual community goals may in fact be more important than quantitative measures of plan “success.” Several interviewees also underscored how engagement increased community awareness, leading residents to place pressure on local governments to implement plans, in turn leading to increased funding and prioritization. Documentation of implementation progress was also important to ongoing engagement with residents. Public progress reports and dashboards help those outside of local government offices understand the ways in which the plan is actively being worked on. At the same time, progress reports with vague and unambitious milestones can give an illusion of greater progress than is actually being accomplished.

In each of four interviews, when asked “What do you see as the barriers to the plans’ implementation?”, the first word interviewees said was “funding.” Local governments face competing priorities and limited resources. Community engagement work is time-intensive and the climate resilience plans included here were extensive, with tens to hundreds of planned actions. Successful implementation requires ongoing engagement, interdepartmental coordination, monitoring, and reporting, in addition to actual project work towards milestones. All of this requires staff time, which requires government investment.

Federal and state grants continue to emerge to support both local governments and community organizations with climate resilience projects, but capacity is needed upfront to develop grant proposals.

POLICY RECOMMENDATIONS

The ultimate goal of this research paper is to develop actionable recommendations for climate resilience practitioners seeking to work among and in partnership with communities. The recommendations below build on best practices identified in the literature and observed in the four case study examples. The goal is to create thoughtful, equitable engagement practices that strive for community ownership, and in doing so, incorporate community priorities, build local capacity, and achieve the intended implementation steps.

1. Extending engagement timelines

Engagement should be seen as an ongoing process, extending before and after the discrete process of drafting a resilience plan. Before beginning a plan, local governments should understand the landscape of environmental justice and frontline communities and seek to build relationships with community organizations and leaders. For example, a member of King County staff studied social and climate vulnerability data and worked to identify, connect with, and provide information to organizations representing vulnerable populations for two years prior to the start of the planning process. In Providence, city staff supported the founding of the Racial and Environmental Justice Committee and collaborated with the group on trainings and drafting working principles before beginning the Climate Justice Plan. After a resilience plan has been established, outreach should continue to provide new members of the public with information on climate resilience efforts, as Dallas has done by committing to attending engagement opportunities in priority communities every month. Community leaders who guided planning should continue to guide implementation. In Providence, Dallas, and King County, groups of community members continue to set priorities, provide feedback on new policies, and select recipients of grant funding.

2. Community leadership for community goals

Engagement efforts should move beyond simply informing or consulting the public, instead striving for community ownership and leadership to the greatest extent possible. Doing so creates a more equitable process with ideas and power flowing from the bottom-up rather than top-down. Deeper engagement ensures the resilience plan is made up of community goals, rather than what practitioners view as climate resilience priorities. This likely means that plans will incorporate a broader range of topics than have traditionally been considered part of climate action, including affordable housing and displacement, career pathways, and energy affordability. Ultimately, each of these are crucial elements of community resilience. Beyond goal-setting community ownership also ensures that implementation aligns with community priorities and that municipal/institutional efforts dovetail with community-led work, rather than counter-acting or duplicating work.

3. Community capacity building

In order to realize collaborative governance and community ownership, practitioners must invest in community capacity. There are three essential capacities communities need to develop climate resiliency: capacity to develop a vision based on community priorities, capacity to assess vulnerability and assets to develop solutions, and capacity to build voice and power to achieve their vision (Gonzalez, 2017). Investing in these capacities can take several forms. Offering training programs and workshops can share information about climate risk and help participants develop needed skillsets. Providing stipends for participants enables people to invest their time in the planning process, building community voice. Lastly, creating large funding pools, like King County, to support community organizations in their leadership implementing actions related to the plan is one of the most significant way local governments can help communities achieve their own vision of resilience.

4. Language access

Language is a crucial consideration for ensuring equitable access to information and decision-making across different communities. Practitioners need to be aware of the languages spoken in their area, even if they are utilized by a relative minority of residents. Local governments can prioritize language skills when hiring staff, partner with cultural organizations, contract translators for communication materials, and contract interpreters for community meetings. Improving language access was crucial across all four plans discussed in the Results section, helping planning efforts reach more people, especially groups typically marginalized by such processes.

5. Reporting progress and evaluation

Regularly reporting progress on the implementation of plan strategies allows for evaluation, strategy adjustment as needed, and creates transparency with community members who are interested in plan progress but lack insight into government activities. Dallas and Portland both provided digital dashboards explaining the status of each strategy included in the plan and recent milestones accomplished. Dallas and King County created public reports scoring themselves on implementation progress.

6. Funding engagement

Additionally, beyond resilience practitioners working in communities, funders, whether those designing federal, state, or philanthropic grant programs, need to recognize the importance of deep engagement. When funding climate resilience planning initiatives, grants must allocate sufficient financial resources for engagement to meet the previous recommendations. Equitable planning outcomes require an equitable process and that this takes significant time and resources, including staff time, trainings, time to identify partners, stipends for partners/participants, and time to build relationships and trust through working together.

CONCLUSION

This research paper sought to answer the question, “what community engagement practices lead to climate resilience plans that achieve implementation steps?” Climate resilience planning was defined as assessing the climate risks facing a specific area and creating detailed steps to adapt, improve resilience, and reduce vulnerability to those risks. The literature review outlined several approaches to community engagement and unique problems that have been observed in resilience planning processes. Ultimately, the literature indicated that there are few detailed examples documenting engagement practices for resilience practitioners and limited research evaluating practices and connecting them to plan performance. After a review of local (city and county) climate resilience-related plans across the United States, the paper then offered four case studies of planning processes that conducted extensive community engagement with attention to equity and justice. These case studies were created using plan and document review, as well as interviews with practitioners who supported either the planning or implementation processes. These examples indicated that engagement practices and implementation are closely linked, with engagement strategies influencing plan goals, implementation priorities, and external pressure on local governments to commit to implementation. Combining learnings from literature review and case studies, I created six policy recommendations for institutional practitioners seeking to work with communities on resilience planning: extending engagement timelines, community leadership for community goals, community capacity building, language access, evaluation and progress reporting, and funding engagement.

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