Procedural Equity and Greening Schoolyards:

A Mixed Method Study of Proposition 84 Funded Projects in Los Angeles County

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<u>Abstract</u>

Greening school campuses offers a critical opportunity to build climate resiliency and combat environmental injustices at a local and regional scale; however, the unique geopolitical landscape of Los Angeles County presents several challenges that complicate implementing and operating such projects. Through a case study analysis of Proposition 84 awarded green schoolyard projects in Los Angeles County, this study investigates issues of procedural equity during the grant application and implementation processes of a project. Using a three-part methodology, this study conducts a funding analysis of Proposition 84 funds and gathered stakeholders' experiences with an online survey and semi-structured interviews. In gathering testimonies from project participants, this study identifies that procedural barriers encountered by these green schoolyard projects predominantly took place after project funding was awarded and were created by Los Angeles Unified School District (LAUSD). Furthermore, this study determines that buy-in and support from school district staff along with the involvement of nonprofit partners represent important factors in determining a green schoolyard project's success. Ultimately, this study identifies the need for policy changes at both the school district and state level including a need for increased oversight of school districts facilities departments, amendments to current school district administrative policies, and an expansion of ongoing technical assistance programs to further alleviate grantees from future procedural burdens.

<u>Acknowledgements</u>

Table of Contents

<u>Introduction</u>

School campuses represent sizable, yet overlooked and underfunded elements of a city's-built environment and public infrastructure (Vincent 2006); As the climate crisis intensifies, many urban planners and environmental justice organizations have turned to school campuses to alleviate the urban heat island effect, air pollution, flooding, and poor access to green space. Simultaneously, the climate crisis has highlighted for many cities how environmental injustices can be exacerbated by a school's-built environment and schoolyard (Barboza 2022). As regions like Los Angeles County experience intense periods of extreme heat and flooding due to the climate crisis, it has become increasingly apparent to parents and community members that asphalt schoolyards pose several health and safety risks for children and adults (Barboza 2022). While public funding opportunities for climate resiliency and urban greening continue to grow, existing procedural inequities limit which communities can access, inform, and ultimately benefit from these investments. In turn, public funds are not always equitably distributed to benefit the communities most affected by environmental injustices and the climate crisis (Christensen 2016).

As a result, this study investigates how Proposition 84, a general bond passed in 2006, has contributed to greening schoolyards in Los Angeles County and what lessons learned can be applied to current and future public funding models. To understand where this study is situated within the fields of environmental justice and urban planning, this study synthesizes existing literature on green schoolyards as an environmental justice issue and the importance of meaningful involvement and equitable implementation in expanding access to green space. From there, this study utilizes a mixed methods approach to gather stakeholders' experiences about

how these green schoolyard projects were implemented and what procedural barriers

materialized during the process. Ultimately, **this study intends to investigate the following**

questions: How have public schools in LA County successfully leveraged funding through

Proposition 84? What are the procedural barriers that materialized when applying for and

implementing these funds?

Overview of Proposition 84

To contextualize this study and its questions of focus, Proposition 84 (The Safe Drinking

Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of

2006) is a general obligation bond that was approved by California voters in 2006 (California

Natural Resources Agency 2022). The overarching goal of Proposition 84 was to fund multi-

benefit projects "that reduce greenhouse gas emissions and are consistent with the state's

planning priorities" (California Natural Resources Agency 2006). Between 2006 and 2015,

Proposition 84 allocated $5.388 billion across eight different funding areas related to water

quality, flood control, and climate change reduction initiatives (California Natural Resources

Agency 2022) (see Figure 1 below). Each of these funding areas designated funding to relevant

grant programs overseen by California state agencies. In particular, Chapter 9 "Sustainable

Communities and Climate Change Reduction" allocated $90 million toward urban greening

projects that "reduce energy consumption, conserve water, improve air and water quality, and

provide other community benefits" (California Natural Resources Agency 2022).

At the time of its passage, Proposition 84 represented the largest state ballot measure

focused on environmental protection in the United States (Davies, Christensen, and Kareiva

2019); however, in many ways, Proposition 84 fell short when distributing funding to

disadvantaged communities and prioritizing issues of environmental justice. In particular, the

bond's official text lacked explicitly defined metrics to prioritize funding for disadvantaged

communities across the state causing larger environmental groups to receive a sizable portion of

this funding (Davies, Christensen, and Kareiva 2019). Likewise, the state of California had yet to

develop CalEnviroScreen, a comprehensive screening methodology that identifies communities

disproportionately burdened by multiple sources of pollution and demographic information

(California Office of Environmental Health Hazard Assessments 2022). As a result, Proposition

84 and the various state agencies that oversaw grant programs that received this funding did not

yet have robust frameworks in place to advance equity and effectively prioritize resources

toward environmental justice communities (Davies, Christensen, and Kareiva 2019). With this

context in mind, this study intends to hear from nonprofit organizations and public schools, two

entities that are already chronically underfunded and lack capacity, about their experiences with

accessing Proposition 84 funding to expand greenspace at schools.

Figure 1: Proposition 84 Funding
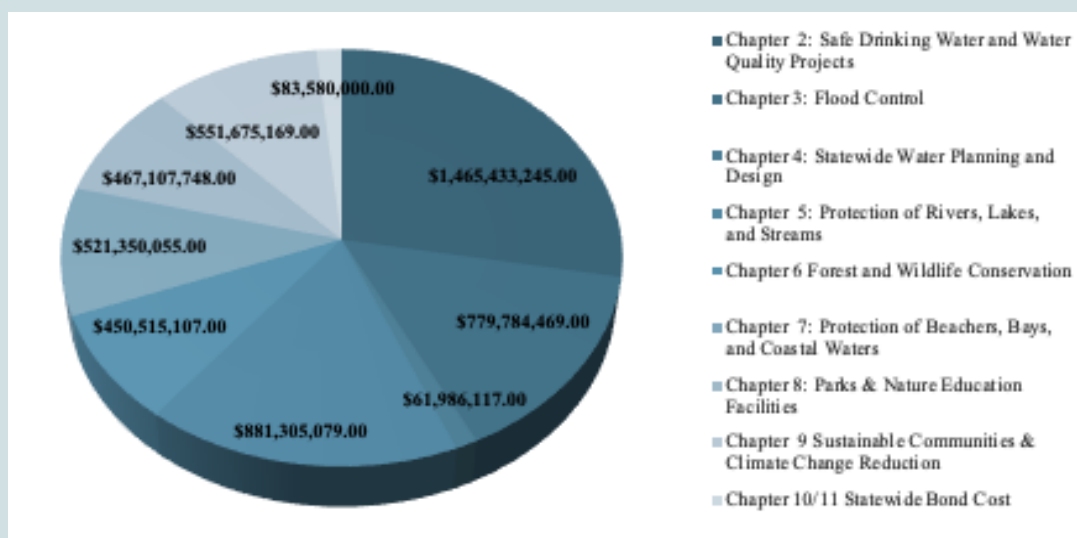
Pie chart depicting distribution of Proposition 84 funding across funding areas.

Literature Review

      While there is limited literature specific to the application of procedural justice to and the equitable implementation of school greening projects, this project aims to understand the connections between the role of green schoolyard projects as public infrastructure in remedying environmental harm, the procedural inequities of accessing public funds, and the participatory challenges of implementing green infrastructure. As a result, this review aims to connect these siloed areas of research to this project's goal of understanding how public schools access funding and implement green schoolyards in Los Angeles County.

      Access to Green Space: An Environmental Justice Issue

What is Environmental Justice?
      Existing literature on environmental justice lays out its definition and how issues of environmental justice disproportionately impact low-income communities of color. According to the US EPA, "environmental justice is 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" (OP US EPA 2014). While many researchers adopt the US EPA's understanding of environmental justice, several researchers note that it is important to understand that environmental justice is concerned with both the distribution of environmental goods and bads as well as the fairness of the process of environmental policy and decision-making (Bell and Carrick 2017). In relation to the purpose of this study, it is important to recognize how issues of environmental justice relate to the distribution of environmental harms as well as the environmental benefits (like green space) that can remediate those harms. Due to this study's geographic area of focus and investigation into

green schoolyards, this study reviewed existing environmental justice literature on green space access and the environmental justice landscape of Los Angeles County.

Access to Green Space and Environmental Injustices

In the field of environmental studies and environmental justice, there is extensive literature that reveals that marginalized communities are disproportionately exposed to environmental harms (Byrne 2017). Simultaneously, these same marginalized communities disproportionately lack access to green space, parks, and other green infrastructure that can remediate environmental harms and health hazards (Byrne 2017). Even when urban green space is equally distributed across urban areas, researchers have discovered disparities in the size and quality of the green space as well as its level of services and amenities (Byrne 2017; Wolch, Wilson, and Fehrenbach 2005).

Environmental Injustices in Los Angeles County

In urban areas across the United States, the issue of inequitable green space and park access connects back to historical redlining practices and other institutionally racist policies that continue to shape current patterns of racial residential segregation, today's racial wealth gap, and a neighborhood's physical environment (Zhang et al. 2022; Nardone Anthony et al. 2021). Using an equity-mapping analysis of park access in Los Angeles, researchers discovered that "...low-income households and communities of color in Los Angeles are apt to be relegated to 'park-poor' neighborhoods, while wealthier districts are more likely to boast plentiful parks and greenbelts provided by public funding. Since more parks and greenspace translate into higher property values (Diamond, 1980; Crompton, 2001b), this inequality translates into growing wealth disparities" (Wolch, Wilson, and Fehrenbach 2005, 8). Existing research concludes that redlined neighborhoods, which continue to be predominantly inhabited by people of color,

disproportionately suffer from environmental injustices including poor tree coverage, elevated

levels of diesel particulate matter, hotter temperatures, and worse air quality (Nardone Anthony

et al. 2021; Byrne 2017; Wolch, Wilson, and Fehrenbach 2005)

Figure 2: Map of Environmental Benefits vs. Burdens in Los Angeles County

Two maps comparing distribution of environmental benefits and environmental burdens across Los Angeles County. *Los Angeles County Parks Needs Assessment Plus, 2022*
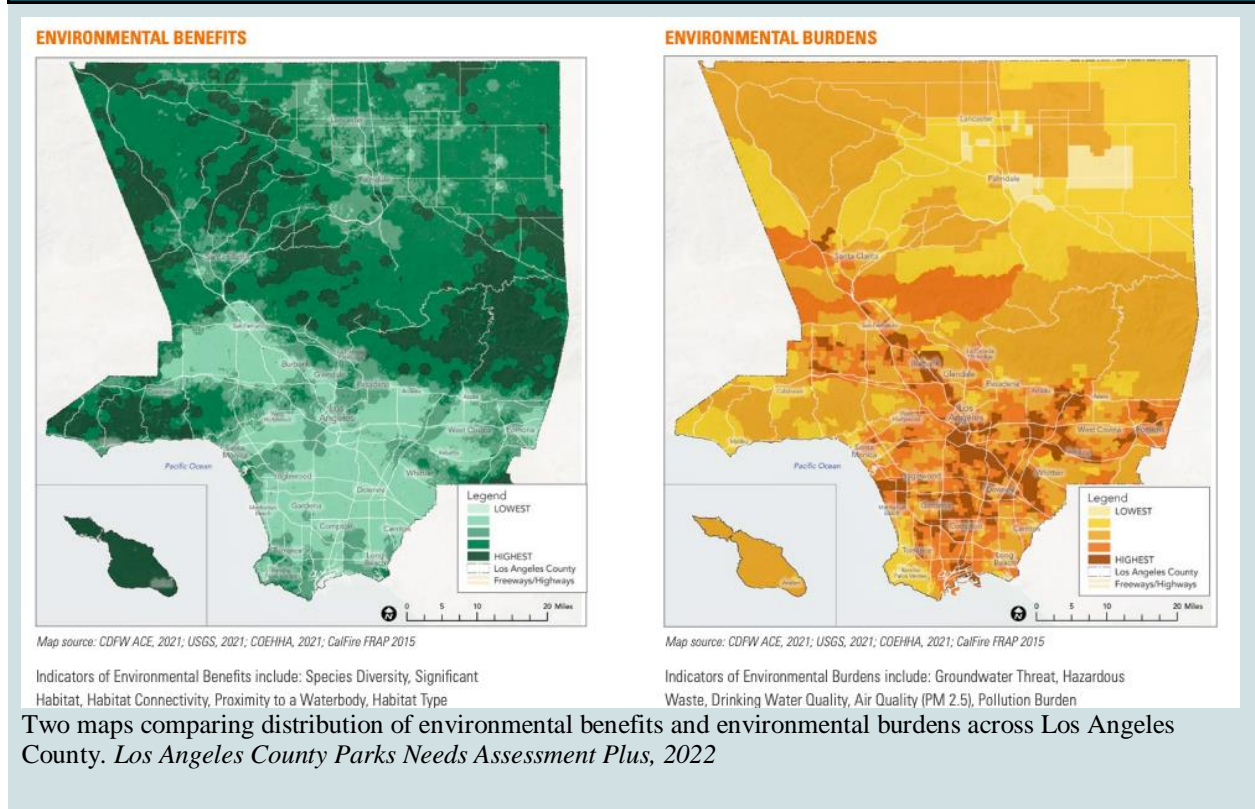
In Los Angeles, the present-day impacts of historical redlining can be seen in the

inequitable distribution of park space and park resources as well as the quality of schoolyards in

low-income communities of color (see Figure 3 below). The equity-mapping analysis of park

access in the City of Los Angeles also revealed that only 29 percent of the population lives

within a quarter mile of a park facility; therefore, nearly 2.6 million adults and 700,000 children

in the City of Los Angeles lack access to parks and recreational resources (Wolch, Wilson, and

Fehrenbach 2005). While white-dominated neighborhoods, where only 235,000 children live,

enjoy 31.8 acres of park space per 1,000 residents, African American neighborhoods have 1.7

park acres per 1000 residents and Latinx-dominated neighborhoods, where most children in Los

Angeles live, have 0.6 park acres per 1000 residents (Wolch, Wilson, and Fehrenbach 2005). In

comparison to using miles to measure the accessibility of parks, a study conducted by the Trust

for Public Land utilized walking time to measure park proximity (Sammons 2021). This study

ultimately found only 64 percent of residents that live in the City of Los Angeles live within a

10-minute walk from a park (Sammons 2021). Evidenced by the pervasiveness of environmental

injustice across Los Angeles County, existing literature points to the need for intentional

community-driven investments in green infrastructure to reverse these historic patterns of

environmental racism.

Figure 3: Areas of Los Angeles County Within ½ Mile of A Park
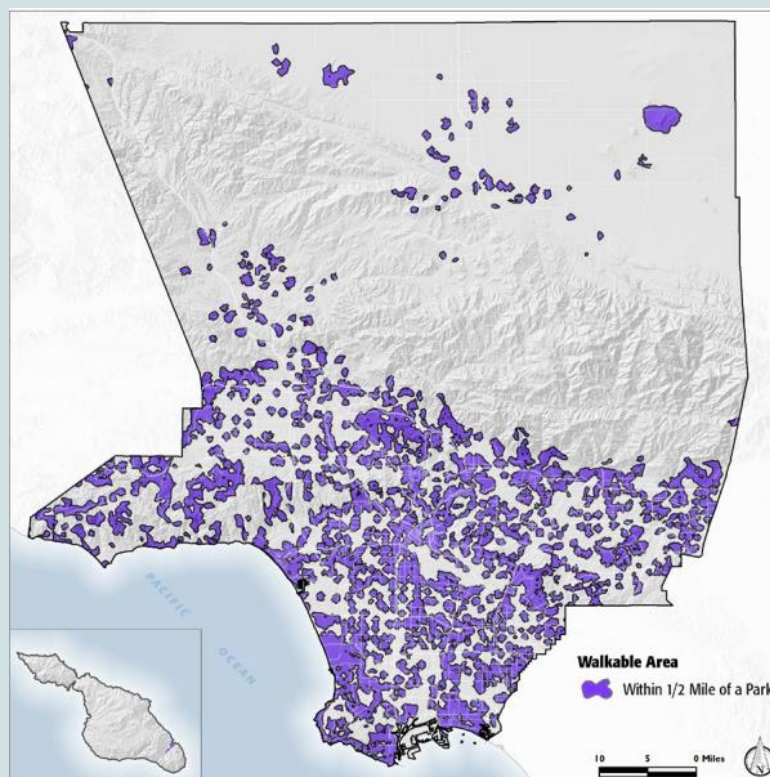
This map depicts communities in LA County that live within ½ mile of a park, a metric of park accessibility.
Los Angeles Park Needs Assessment, 2016

Environmental Injustices in the Schoolyard

In addition to the racial inequities of green space and park access, a growing amount of research reveals the striking inequities in the spatial distribution of park space for children and youth. By conducting spatial analyses of 534 LAUSD elementary school sites' tree canopy, researchers discovered that 20 percent of LAUSD schools had both no tree canopy coverage in play areas and 100 percent paved surfaces (Moreno et al. 2015). The environmental assessment of school shade tree canopy in LAUSD school sites reveals that low-income children of color with no access to a car have the least access to parks and to schools with at least five acres of playing fields in LA County (Moreno et al. 2015). With a lack of trees to provide shade and few cool surfaces to play on, many students across Los Angeles County are at a higher risk of heat exposure which is associated with an increased risk for heat-related illnesses, and impaired concentration in children (Barboza 2022). Not only do these asphalt-covered schoolyards pose several health risks, but they also reinforce existing environmental injustices related to access to shade and green space.

Public Schools as Public Infrastructure

Our nation's public school system represents a unique kind of physical and social infrastructure that can play a role in remedying these environmental harms (Vincent 2006). With public school systems making up a large amount of land and buildings in cities across the country, it is evident that the quality of our public schools and the quality of our cities are interdependent (Vincent 2006). While the vitality of our public-school systems and cities are intertwined, the planning of our cities and our public-school infrastructure is often extremely siloed ((Vincent 2006). According to Jeffrey M. Vincent, "the critical problem in the separation of school facility planning from municipal land use planning is that there is often no institutional

framework that even creates a space for these planning entities to plan together" (Vincent 2006, 433). As a result, it is critical that the capital planning of public schools becomes integrated into broader urban planning discussions and policy decisions so that city and school planners can improve educational inequities as well as environmental injustices at both local and regional levels.

As the climate crisis continues to exacerbate existing environmental injustices, transforming schoolyards offers a critical opportunity to alleviate the current lack of accessible green space in Los Angeles County while using existing public infrastructure. Since school is compulsory and publicly funded in the United States, researchers argue that "...integrating nature in school grounds would ensure that every child has access to nature in places where they are required to spend a significant portion of their daily lives." (Stevenson et al. 2020, 2). Likewise, it is reported that an 87.7 percent increase in equitable park access would occur if asphalt schoolyards transformed into green schoolyards with community access were implemented in the City of Los Angeles (Sammons 2021). In relation to the case for greening school campuses, the public schools represent a historically overlooked yet critical kind of public infrastructure. Public school campuses as public infrastructure offers a unique opportunity to both alleviate environmental harms and expand equitable access to greenspace at the local and regional scale.

The Benefits of Green Schoolyards

Figure 4: The Benefits of Green Schoolyards
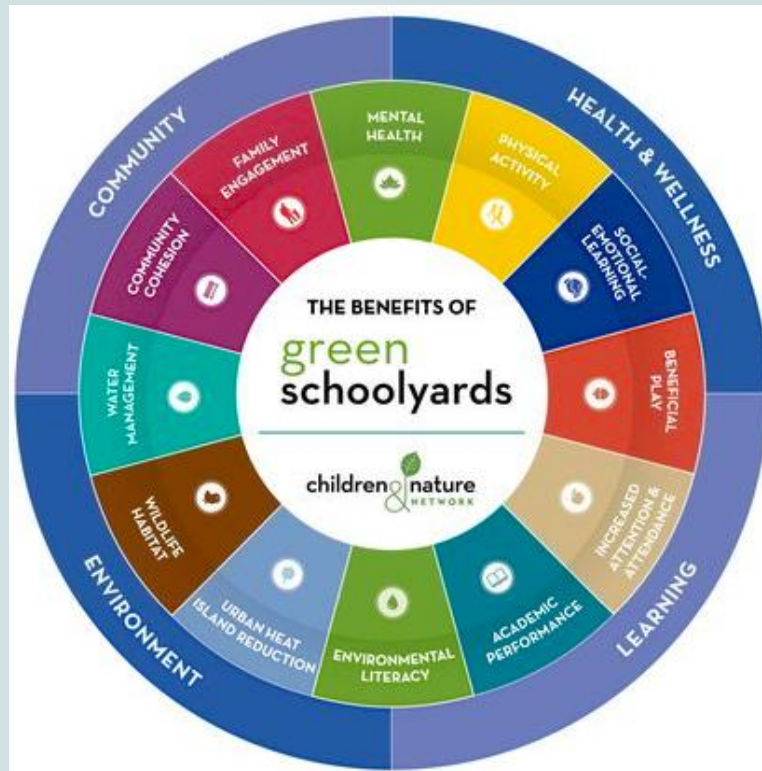
Diagram of community, health, educational, and environmental benefits of green schoolyards. (Children and Nature Network 2021)

Green schoolyards are important spaces that help to mitigate climate change, improve student well-being, and promote physical activity on school campuses; however, most schools were not designed with green spaces and their benefits in mind (Barboza 2022). Despite the widespread benefits of transforming asphalt into ecologically diverse schoolyards, many school districts in LA County lack the funds as well as the capacity to seek external funds to afford these green infrastructure projects (Raney, Hendry, and Yee 2019). With the rise in publicly

available funds for urban greening and specifically green schoolyard projects, it is important to

recognize that the removal of asphalt and the subsequent addition of trees, native plants,

bioswales, and other sustainable landscaping to school campuses provides several social,

environmental, and health benefits to students and surrounding communities. Existing literature

predominantly focuses on the health, community, and environmental benefits associated with

greening school campuses. Overall, the literature finds that students, their communities, and their

surrounding environments experience several benefits from the addition of green space to school

campuses; however, not all communities experience these benefits because access to green

spaces, like green schoolyards, is inequitable and represents an environmental justice issue.

Physical Health and Wellbeing

When children have access to green schoolyards or similar green spaces, existing

research reveals that children experience positive benefits to their physical and socio-emotional

health due to increases in their daily physical activity and increased access to nature (Bikomeye,

Balza, and Beyer 2021). Through a stepwise impact evaluation and direct observations before,

immediately following, and four months after the completion of Eagle Rock Elementary

School's green schoolyard project, researchers discovered increases in physical activity levels

and interactive play at the individual and population levels following the completion of the

project (Raney, Hendry, and Yee 2019). As a result, existing research reveals these increases in

physical activity in the schoolyards can help to combat health disparities amongst children and in

the surrounding community (Bikomeye, Balza, and Beyer 2021; Stevenson et al. 2020).

Access to nature through green schoolyards has also been found to improve children's

emotional well-being and socio-emotional learning. Based on reports that measured children's

emotional well-being and the perceived restorative qualities of green schoolyards, researchers

found that the addition of green schoolyards positively improved children's attention spans, reduced levels of depression, and increased recovery from stress (Stevenson et al. 2020; Bikomeye, Balza, and Beyer 2021; van Dijk-Wesselius et al. 2018). One important factor that determines the degree to which children reap these socio-emotional benefits is whether their exposure to this green space is prolonged (Bikomeye, Balza, and Beyer 2021)). Given the benefits of cumulative and prolonged exposure to green space at schools, it is critical that school greening initiatives expand their efforts beyond elementary schools to ensure that students receive longer term benefits of green space exposure throughout their K-12 education.

Environmental Benefits

In relation to the field of environmental studies and environmental justice, there is extensive literature on the multiple environmental benefits of green schoolyard projects and their role in mitigating the impacts of climate change. Existing literature specifically points to how green schoolyards are "an effective and multi-beneficial tool to address climate change as a means to offset the heat island effect, absorb rainwater, and abate fine particle pollution" (Flax et al. 2020, 3). By replacing impermeable asphalt with green spaces and incorporating nature-based solutions, green schoolyards function as carbon sinks that help to cool the temperature of the surrounding neighborhood (Flax et al. 2020). In addition to alleviating the urban heat island effect and providing local air quality benefits, a growing amount of research points to the potential of green schoolyard projects as effective stormwater management solutions (SF Water Power & Sewer 2017; Barclay 2016; Mandarano and Meenar 2017). When green schoolyard projects are designed with bioswales and stormwater capture features, schools can play a critical role in reducing presson on urban drainage systems while recharging local groundwater basins (Flax et al. 2020; "Schools and Stormwater" 2022). Based on existing research, greening school

campuses that are designed to provide multiple benefits are powerful tools in building climate resiliency and combat existing environmental injustices; however, additional in-depth research and case studies are needed to understand how green schoolyard projects can play a role in advancing stormwater infrastructure at a regional level.

Community Benefits

In addition to the benefits associated with green schoolyards at the individual and environmental level, communities that surround green schoolyards also benefit from increased access to green spaces and the associated benefits mitigating environmental harms. The addition of urban green space has also been found to help facilitate greater neighborhood social cohesion, improve perceptions of safety, lower crime levels, and increase pro-environmental behaviors (Bohnert et al. 2022; Stevenson et al. 2020). Despite the extensive evidence that confirms greening schoolyard projects benefit a school's surrounding community, one study notes a critical caveat. The community benefits of green schoolyard projects are dependent on whether the schoolyard has a joint-use agreement that permits it be accessible to the public after school hours (Zhang et al. 2022). Given this caveat, more research is needed to investigate the challenges of establishing and maintaining joint-use agreements and community school park spaces. In reviewing and evaluating the growing literature around green schoolyards and their benefits, there is an apparent lack of academic research that investigates the actual funding, implementation, and long-term maintenance of green schoolyards.

Procedural Justice and Equity

Existing literature on procedural justice and procedural equity lays out their relevance to environmental justice and empowered participatory processes. As one of the three dimensions of justice, procedural justice refers to the fairness and inclusiveness of how decisions are made and

who makes them (Ruano-Chamorro, Gurney, and Cinner 2022; Bell and Carrick 2017; Low

2013).[1] Meanwhile, existing literature defines procedural equity as equitable and inclusive

participation where communities have a voice in decision-making processes (OAR US EPA

2019; Meerow, Pajouhesh, and Miller 2019; Georgetown Climate Center 2020). In the context of

climate resilience planning, Meerow, Pajouhesh, and Miller's definition of procedural equity

stresses the importance of ongoing public participation and authentically engaging "marginalized

groups that often are underrepresented in traditional public engagement processes" (2019, 798).

For this reason, Meerow, Pajouhesh, and Miller's (2019) emphasis on "ongoing" participation

and engagement underlines a key aspect of procedural equity that differentiates it from

procedural justice. While both concepts are rooted in the understanding that low-income

communities and communities of color have been historically excluded from decision-making

processes, literature on procedural equity outlines different mechanisms to operationalize equity

and lead to just outcomes (Fitzgerald 2022). Ultimately, procedural equity encapsulates the need

for authentic engagement and meaningful participation where underrepresented communities

have more than just a seat at the table. In relation to green infrastructure and climate resilience

planning, procedural equity identifies the need for meaningful participation and involvement

throughout the project development process, the need for long-term trust building with

marginalized communities, and frameworks for equitable implementation.

Meaningful Participation
Due to systemic inequities in decision-making processes, researchers point to the concept

of **meaningful participation and involvement** to create more just and equitable decision-

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[1] The three dimensions of justice include distributive, procedural, and interactional justice (Rigolon and Gibson 2021).

making processes. Existing literature defines meaningful participation and involvement as the opportunity for individuals to participate in decisions that affect their lives, communities, and environment (Skinner-Thompson 2022). More specifically, meaningful involvement can be exemplified by individuals' contributions influencing regulatory decisions, their concerns being considered in decision-making processes, and decision-makers seeking out and facilitating the involvement of potentially affected community members (Skinner-Thompson 2022). Similarly, the idea of co-governance, or decision-making shared between government entities and communities, reflects the importance of centering community members in governance responsibilities through bottom-up self-governance structures (Arnold 2021). When community members and stakeholders can participate in the planning and decision-making that shapes their community and local environment, meaningful involvement and co-governance, where power is devolved to local communities and empowers them by giving them meaningful control and influence over decisions, can effectively help build community resilience (Arnold 2021).

Meaningful Participation in School Greening Projects

In relation to school greening projects, existing literature on meaningful participation and involvement often focuses on children instead of the broader community. Based on the results of a longitudinal study of meaningful involvement and participation at two school greening projects in Sweden, researchers determined that it is critical for children to be meaningfully involved in the design and planning stages of green schoolyard projects to ensure that the final schoolyard's final design is functional and fits the needs of the school's children (Jansson, Mårtensson, and Gunnarsson 2018). While this study from Sweden exemplifies meaningful involvement and participation in the context of green schoolyard projects, future research should focus on

meaningfully involving students and the broader school community through green schoolyard

projects and especially one's located in underrepresented communities.

Equitable Implementation of Environmental Funding and Projects

Across the discipline of urban planning, the concept of equitable implementation refers to

incorporating social considerations and utilizing diverse and inclusive planning processes to

mitigate inequities (Barclay 2016; Mandarano and Meenar 2017; Skinner-Thompson 2022).

Before discussing specific recommendations that have been put forward to improve the equitable

implementation of public funding processes and green infrastructure projects, it is important to

first discuss an overview of equitable implementation and how its definition varies across the

disciplines of green infrastructure and environmental funding. While passing policies and

creating funding opportunities to finance green schoolyards and similar urban greening

initiatives is important, the gaps and uneven implementation can create additional gaps in access.

Examples from Green Stormwater Infrastructure Projects

In two different case studies of the implementation of green infrastructure projects in

Atlanta and Philadelphia, researchers assess the equitable implementation of green infrastructure

and the role of community capacity-building. The case study of Atlanta, Georgia specifically

assesses the role of community participation in the development of green stormwater

infrastructure (Barclay 2016). In doing so, the researcher defines implementation using five

different stages: the output of the public participation process; design or commitment on the part

of the lead agency; changes in law, regulation, or policy; actions taken on the ground; and

changes in environmental quality (Barclay 2016). While this author's definition of

implementation focuses on the different components that are involved in green stormwater

infrastructure development, these five stages can be universally applied across green infrastructure projects.

Similarly, the case study of Philadelphia, Pennsylvania assesses the factors that influence the distribution of public and private sector investments in green stormwater infrastructure (GSI) (Mandarano and Meenar 2017). Likewise, the authors adopt a capacity-building framework to better understand how to make the implementation of GSI more equitable in Philadelphia's disadvantaged communities. As a result, the authors propose a three-step framework to prioritize areas of public investment in GSI that includes: identifying disadvantaged census tracts, identifying tracts based on their level of capacity, and identifying priority census tracts based on high levels of disadvantage and high levels of capacity (Mandarano and Meenar 2017). Both Barclay (2016) and Mandarano and Meenar's (2017) green infrastructure-focused applications of equitable implementation provide insight into how equitable implementation is understood and framed within the context of green infrastructure projects as well as the importance of prioritizing disadvantaged communities to receive these environmental benefits.

Learning from LA County Bond Measures W and A

Comparatively, existing literature on the framing of equitable implementation reveals the challenges of accessing public funds as well as the procedural inequities that exist in current funding processes (Carter, Pastor, and Wander 2018; Wang 2021). While assessing specific environmental measures passed in LA County, both reports define equitable implementation using a three-dimensional approach that acknowledges the past, present, and future. Based on a study that assesses Measure W's Safe Clean Water Program, equitable implementation:

> prioritizes investments that close historic gaps to improve economic and health opportunities in underinvested communities; involves authentic partnerships with CBOs to support community-based participation, power, and shared decision-making; and

mitigates disparities that are likely to emerge in the future by addressing future harms that may result from new investments and leveraging funding for long-term community health and organizational capacity (Wang 2021, 11).

Similarly, another study evaluating a bond measure in LA argues "equitable implementation will require (re)building trust between agencies and the constituencies that they serve—and nothing else builds trust like repeated engagement. Beyond building trust, it is critical to define equity, create equitable processes, and design metrics" (Carter, Pastor, and Wander 2018, 45). In comparing two studies that evaluate the equitable implementation of Measure W, M, and A, both studies offer insightful recommendations for improving equity in funding implementation processes specific to the LA region. Both studies recommend incorporating equity into funding related decision-making processes by providing technical assistance to applicants with limited resources and capacity, prioritizing equity in grant scoring criteria, and creating monitoring processes to assess equitable outcomes (Wang 2021; Carter, Pastor, and Wander 2018). With these definitions of equitable implementation in mind, this study intends to investigate the circumstances of Proposition 84 awarded green schoolyard projects and where work is needed to advance equity moving forward.

Research Gaps and Conclusion

Through reviewing existing literature, it is evident that green schoolyards represent a powerful tool to combat environmental injustices at schools and in their surrounding communities. Simultaneously, existing literature on procedural inequities reveals that there are several procedural and structural barriers that complicate green infrastructure projects from coming to fruition. Across the fields of environmental justice, procedural justice and urban planning, there are several gaps in existing research on how these topics apply to greening schools. Namely, more robust research is needed that investigates how green schoolyard projects

receive funding; how the concepts of meaningful involvement and equitable implementation

materialize on green schoolyard projects; and lastly, successful models for the equitable

implementation of green schoolyard projects. These critical gaps in current literature on

accessing public funds and equitably implementing green schoolyard projects illustrates the

unique intersection that this project intends to address. As a result, this study investigates: **How**

have public schools in LA County successfully leveraged funding through Proposition 84?

What are structural barriers that may arise that can create challenges in applying for and

implementing these funds?

Methodology

This study utilized a mixed methods approach to analyze the grant application and

implementation process for 11 green schoolyard projects in Los Angeles County that were

awarded Proposition 84 funding. This study first performed a funding analysis using secondary

sources to understand the different institutions and processes involved with accessing

Proposition 84 funding. From there, this study utilized an online survey and semi-structured

interviews to collect primary data on the procedural barriers that these green schoolyard projects

encountered. Before primary data collection, this study received human subjects' approval from

Occidental College's Internal Review Board on November 12th, 2022.

Study Area

Los Angeles County is one of the geographically largest counties in the United States and

is composed of 75 different school districts that serve over 1.3 million students (EdSource 2022).

For the purposes of this study, the school districts of focus include Los Angeles Unified School

District, Glendale Unified School District, Compton Unified School District, and Torrance

Unified School District. As a result, it is important to note that these school districts encompass

very different student populations due to the racial and socioeconomic segregation that exists

within Los Angeles County (Rivera 2018). This study specifically focuses on 11 school sites that

received funding for the purpose of a school greening project from different Proposition 84 grant

programs. These 11 school sites comprise 10 elementary schools and one high school (see Figure

5 below). A table of the school sites is attached as Appendix B.

Figure 5: Map of Proposition 84 Green Schoolyard Projects in LA County
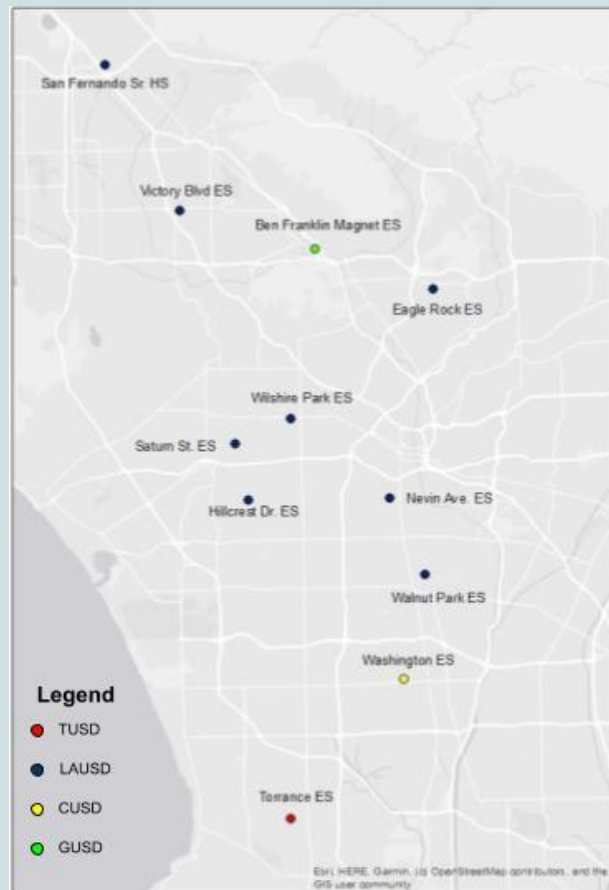
Map depicts where Proposition 84 green schoolyard projects are located across LA County and their corresponding school district.

Funding Analysis: Following the Money

Before engaging with individuals that worked on Proposition 84 funded green schoolyard projects, this study drew inspiration from Hughes-McLure's original follow the money methodology to understand how Proposition 84 funding was awarded and administered. The financial analyses conducted in Hughes-McLure (2022) and Christopher's (2011) studies were far more complicated and extensive; however, their studies provide helpful frameworks and approaches for how to go about "following money." According to Hughes-McLure, "the first step to follow the money is mapping the network of flows of money and actors… The mapping process is key not only to create clarity to identify the money to follow, but also to determine the scope of the study. It defines a starting point for following money" (2022, 1306–7). In the case of Proposition 84 funding, a "follow the money" methodology allowed this study to both identify the process of awarding funds to these specific green schoolyard projects and the different institutions that these grantees had to interact with. While evidence of a project receiving a funding award implies that it was implemented, this process is not linear. For this reason, this methodological framework not only helps to determine how green schoolyard projects are funded but also whether they were implemented or not. As a result, this study aims to answer the following questions when following Proposition 84 funding:

- What are the state agencies that administered Proposition 84 funding grant programs, and did they provide any technical assistance?
- Which Proposition 84 grant programs funded green schoolyard projects?
- What schools in Los Angeles County received Proposition 84 funding and were these projects ultimately implemented?

To track and analyze the flow of Proposition 84 funding, this study first relied on data found on the California Bond Accountability website including Proposition 84's project database, allocation balance report, and the bond's official text (California Natural Resources Agency 2022; 2023; "Proposition 84 Project Keyword Search" 2023). In gathering information to answer the questions listed above, this study created flow charts and tables to visualize the flow of Proposition 84 funding from the state to different grant programs to individual green schoolyard projects. Ultimately, the purpose of this funding analysis was to identify institutions and processes where procedural barriers could have occurred for grantees of these specific Proposition 84 grant programs.

Stakeholder Surveys

After identifying the different schools that were awarded Proposition 84 funding and who served as the primary project partner, this study developed an online survey using Qualtrics to gather information about these 11 green schoolyard projects from project participants. **Ultimately, the purpose of this survey was to gain a better understanding of each green schoolyard project and the different stakeholders that were involved.**

Survey Questions

The online survey consisted of 30 questions that focused on four main areas: general information about the green schoolyard project; the individual's experience and involvement on the project; the involvement of different stakeholder groups across project phases; and the accessibility of the green schoolyard to the surrounding community. During sections of the survey that assessed each phase of the project, respondents were asked to rank the involvement of the following stakeholder groups: community members, Parent Teacher Associations (PTA's), and external groups (non-profit partners, consultants, etc.). These survey questions were

designed using a scale of one (not involved) to five (highly involved) to gauge the involvement of each stakeholder group. To ensure that survey participants only responded to questions relevant to their individual involvement of each project, survey questions about the grant application, design and implementation, and operations and maintenance utilized skip logic. As a result, not every question in the survey received 18 responses. At the end of the survey, participants were asked to list any relevant individuals that should be contacted for the study and if they would like to participate in a 30-minute follow-up interview. These two questions were included with the intention of initiating a snowball sampling method and to better who should be included in the survey's audience. Stakeholder survey questions are attached as Appendix B.

Survey Outreach

Due to the wide variety of groups and individuals involved in green schoolyard projects, the survey's audience included school administrators, community members, non-profit partners, teachers, private consultants, and school district staff. To distribute the survey, this study compiled an initial list of contacts of the project partners and individuals that were potentially involved. Names and contact information were gleaned from various school, nonprofit, and school district websites as well as published reports and public records about the green schoolyard projects. From there, this study emailed an initial list of 90 contacts with the survey. As part of the snowball sampling method this study utilized, the initial group of individuals contacted either shared the survey with their colleagues or provided contact information for other individuals to contact who were also involved in these green schoolyard projects. In the end, this study sent over 130 emails to share and distribute the survey.

Semi-Structured Interviews

12 semi-structured interviews were conducted with two main stakeholder groups: individuals that worked on green schoolyard projects and state agency staff knowledgeable of Proposition 84 and similar grant programs. According to several researchers, semi-structured interviews help provide in-depth and contextual information that is not easily captured in surveys (Leech 2002). For this reason, this study conducted follow-up interviews with survey respondents to better understand their experience working on the green schoolyard project, what barriers and challenges they encountered, and lessons learned.

All twelve interviews were conducted over the phone and ranged between 20 and 50 minutes long. The 12 semi-structured interviews were transcribed using Otter.Ai and edited manually for accuracy. The transcribed interviews were then read and coded several times in Dedoose to identify common themes and patterns for the purposes of thematic analysis (Bowen 2009, 32). During this process, this study took both iterative and inductive approaches to the coding process. This means that both pre-established codes were used based on the interview questions and additional codes were generated during the coding process by identifying new themes (Thomas 2006). The codes were then grouped into categories based on their similar themes and explored in greater detail.

Interviews with Green Schoolyard Participants

This study conducted nine semi-structured interviews with participants of Proposition 84 green schoolyard projects to gain a deeper understanding of the structural and procedural barriers each school site faced across the project development process. Of these nine interviews, six were conducted as follow-up interviews with survey respondents. The three remaining interviews were conducted with individuals that didn't participate in the study's survey due to challenges with

technology or limited time. Collectively, these nine interviewees were involved at the following

schools: Saturn Elementary School, Ben Franklin Magnet Elementary School, Eagle Rock

Elementary School, Washington Elementary School, and Victory Boulevard Elementary School.

A list of the interview participants can be found in Table 1.

Table 1: Green Schoolyard Project Interview Participants			
No.	**Interview Participant**	**Affiliation**	**Green Schoolyard Project**
1	Melissa Patrick	Rings of Saturn and Community Member	Saturn Elementary School, LAUSD
2	Monica Compagna	Parent, Paid Plant Caretaker	Ben Franklin Magnet Elementary School, GUSD
3	Anonymous	Green Team Lead, Parent Volunteer	Ben Franklin Magnet Elementary School, GUSD
4	George Ballteria	Project Manager, NorthEast Trees	Ben Franklin Magnet Elementary School, GUSD
5	Bevin Ashemiller	Parent and Researcher	Eagle Rock Elementary School, LAUSD
6	Liz Jennings	Project Manager, Mountains Recreation and Conservation Authority (MRCA)	Washington Elementary School, CUSD
7	Matt Romero	Landscape Architect, Studio-MLA	Eagle Rock Elementary School, LAUSD
8	Sharyn Romano	Executive Director, Los Angeles Beautification Team	Eagle Rock Elementary School, LAUSD Victory Boulevard Elementary School, LAUSD
9	Amanda Millet	Parent, Grant Writer	Eagle Rock Elementary School, LAUSD

State Agency Interviews

The second group of interviewees included three individuals that work for state agencies

including the California Department of Forestry and Fire Protection (CAL FIRE) and the

California Strategic Growth Council (SGC). The goal of these interviews was to understand how

state agencies that serve as grantors select project applicants, administer grants, and the structural

barriers that applicants often encounter when applying for or implementing these funding

awards. Two of the three individuals interviewed were specifically identified due to their

involvement and knowledge of CAL FIRE's Urban Forestry Program and the SGC's Urban

Greening Grant Program, respectively. The third individual interviewed was suggested by

interviewee Elizabeth Grassi due to her expertise in administering grants with community

capacity building and technical assistance programs that advance equity. Interview questions are

attached as Appendix C. A list of interview participants can be found below in Table 2.

Table 2: State Agency Interview Participants		
No.	Interview Participant	Affiliation
1	Walter Passermore	California Department of Forestry and Fire Protection (CALFIRE)
2	Elizabeth Grassi	California Strategic Growth Council (SGC)
3	Anonymous	California Strategic Growth Council (SGC)

Results and Analysis

Funding Analysis

To track and visualize the flow of Proposition 84 funding, this study compiled

information into several flow charts. Based on the information gathered from California's

Natural Resources Agency's Bond Accountability website, Proposition 84 was distributed to 63

different grant programs across 20 different state agencies; however, only four of the 63 grant

programs funded green schoolyard projects (California Natural Resources Agency 2022). A

flowchart of Proposition 84 and the different grant programs can be found in Appendix A. Of the

63 grant programs that received funding across Proposition 84's nine different funding areas,

four grant programs from two different funding areas awarded funding for implementation

funding to 11 green schoolyard projects in Los Angeles County (California Natural Resources

Agency 2022). These four grant programs include the Coastal Conservancy Program, Statewide

Park Development and Community Revitalization Program, the Strategic Growth Council's

Urban Greening Grant Program, and CAL FIRE's Urban Forestry Program.

Figure 6: Flow Chart of Proposition 84 Funding

Proposition 84
Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006

Chapter 7
Protection of Beachers, Bays, and Coastal Waters

Amount Allocated: $521,350,055

Department	Program	Amount Allocated	Program Description
State Coastal Conservancy	Coastal Conservancy Programs	$135 million	The Coastal Conservancy Programs aims to fund projects that demonstrate one or more of the following goals: landscape or habitat linkages, watershed protection, large unprotected areas and habitat linkages, and if there is a non-state match.

Chapter 9
Sustainable Communities & Climate Change Reduction

Amount Allocated : $551,675,169

Department	Program	Amount Allocated	Program Description
California State Parks	Statewide Park Development and Community Revitalization Program	$400 million	The Statewide Parks Program aims to create new parks and recreation opportunities in disadvantaged communities across the state of California.
Secretary for Natural Resources	Strategic Growth Council Urban Greening Grant (UGG) Program	$69 million	The goal of SGC's Urban Greening Grant Program is to increase access to community green space and improve the sustainability and livability of California's communities.
California Department of Forestry and Fire Protection (CAL FIRE)	Urban Forestry Program	$21 million	The goal of CAL FIRE's Urban Forestry Program is to advance the development of sustainable urban and community forests by improving and expanding the management of trees and vegetation in urban environments across the state.

In analyzing Proposition 84's official text, the bond only mentioned allocating funding to schools once and only discussed funding for technical assistance twice. In Chapter 9: Sustainable Communities and Climate Change Reduction, the bond identified several priorities including that "projects that provide multiple benefits, use existing public lands, serve communities with the greatest need, and facilitate joint use of public resources and investments including schools" and "outreach and technical assistance shall be provided to underserved communities to encourage full participation in the program or programs" (California Natural Resources Agency 2006).

As illustrated in the flowchart above, Proposition 84 awarded green schoolyard projects in LA County came from four separate grant programs that were administered by four different state agencies. While the flow of money from state grantors to grantees appears like a rather streamlined process, the information gathered from secondary sources and semi-structured interviews would reveal otherwise. The complexity of this process was especially revealed when investigating the second question posed in the methodology section: *"What schools in Los Angeles County received Proposition 84 funding and were the projects ultimately implemented?"* After gathering information on each green schoolyard project from the California Bonds Accountability Website's Proposition 84 Project Database, this information was compared with public information gleaned from public records, news articles, websites, and project reports (California Natural Resources Agency 2022). It is important to note that information gleaned from the study's survey and semi-structured interviews was also critical in verifying some of this information. In comparing these different sources of information, this study found discrepancies in the reported project status displayed on the Proposition 84 Project Database. Namely, the database reported that both Saturn Elementary School and Hillcrest Elementary School's green schoolyard projects had been completed (California Natural

Resources Agency 2022). To clarify the status of these green schoolyard projects, all information has been compiled into one table found in Appendix B and profiles of each school site in Appendix F.

Survey Results

The survey for this study received **18 survey responses** that provided data for **eight of the eleven school sites** (see Table 2 below). The survey gathered responses from a wide variety of stakeholder groups including parent volunteers, community members, teachers, non-profit partners, consultants, and "others". Survey respondents that selected "other" indicated their role as either a government partner, researcher, or school district personnel. To efficiently present the survey results, this study has compiled key findings from the survey into Table 4 below. In addition to gathering information about which stakeholders are typically involved in each phase of the green schoolyard's development, this survey has helped to compile information about each project that is otherwise difficult to find on the internet. Likewise, several questions in the survey aimed to identify who was involved in each phase of each green schoolyard project. These results have been gleaned and added to Table 13 in Appendix B.

Table 2: Distribution of Survey Responses Across Green Schoolyard Projects											
School Site	**Eagle Rock ES**	**Franklin Magnet ES**	**Washington ES**	**Victory Blvd ES**	**Saturn ES**	**Walnut Park ES**	**Wilshire Park ES**	**San Fernando Sr. HS**	**Nevin Ave. ES**	**Hillcrest Drive ES**	**Torrance ES**
Count	4	4	3	2	2	2	2	2	0	0	0

Main Finding #1: External Partners Reported as Most Involved Stakeholder

Table 3: Key Survey Finding- External Partners Reported As Most Involved				
Grant Application Process				
Survey Question	**Min.**	**Max.**	**Mean**	**Count**
Individuals That Worked on Grant Application	3	6	4.13	8
Hours To Complete Grant Application	3	40	28.86	7
Level of Experience with Grant Writing and Applying for Grant Funding (Scale from 1 to 5)	1	5	3.43	7
Involvement of Parent Teacher Associations (Scale from 1 to 5)	1	3	2.50	6
Involvement of External Groups (NGO, consultant, etc.) (Scale from 1 to 5)	1	5	4.0	8
Involvement of Community Members (Scale from 1 to 5)	1	4	3.14	7
Design and Implementation Process				
Survey Question	**Min.**	**Max.**	**Mean**	**Count**
Involvement of Parent Teacher Associations (Scale of 1 to 5)	1	5	2.82	11
Involvement of External Groups (NGO, consultant, etc.) (Scale of 1 to 5)	2	5	4.42	12
Involvement of Community Members (Scale of 1 to 5)	1	4	3	12

Based on the survey results depicted in Table 3 above, survey respondents consistently reported that external groups including non-profit partners and private contracts as being the most involved stakeholder group during both the grant application and design and implementation phases of the green schoolyard projects. This is an important finding as it points to the critical role nonprofits play in the green schoolyard movement and their work as technical advisors on these projects. Additionally, the large involvement of "external partners' ' also points

to the involvement of private landscape architecture and engineering firms. This is critical to note as it underscores the importance of CBOs and nonprofits in ensuring that the work of these private contractors is community informed. Lastly, it is interesting to note that community members are reported to have been slightly more involved than Parent Teacher Associations (PTA). This finding is particularly insightful because existing literature and discussions of green schoolyard projects suggest that PTAs have traditionally been involved in the green schoolyard movement. While PTAs were rated as being less involved by survey respondents, this does not necessarily mean that parents themselves were not involved on these projects. Given that five parents participated in the survey, it is important to note that the exclusion of parents as a separate stakeholder group represents a limitation to this survey's findings.

Main Finding #2: School Districts Are Mainly Responsible for O & M

Table 4: Key Findings about Operations and Maintenance			
Survey Question	**Survey Responses**	**Percent**	**Count**
Who is responsible for the Operations and Maintenance of the green schoolyard project?	The School District	26.83%	11
	The School's Foundation	14.63%	6
	Non-Profit Partner	17.07%	7
	Parents and Volunteers	14.63%	6
	School Staff	12.20%	5
Are you involved in the Operations and Maintenance of this green schoolyard project?	Yes	35.29%	6
	No	64.71%	11

Based on the survey results relating to what stakeholder group is responsible for the Operations and Maintenance (O&M) of the green schoolyard, school districts are the main

stakeholder group responsible; however, school foundations, non-profit partners, and parents and volunteers collectively received over 50 percent of the responses. In analyzing these results, it is important to recognize that this question left the level of responsibility relatively vague for survey participants. As a result, it is difficult to gauge what level of involvement and responsibility each stakeholder group had on each green schoolyard project from this survey alone. Lastly, it is important to note that LAUSD is responsible for O&M of its school campuses.

Main Finding #3: Lack of Community Access at Proposition 84 Green Schoolyards

Table 5: Community Accessibility of Green Schoolyard			
Survey Question	**Survey Responses**	**Percentage**	**Count**
How would you describe the accessibility of this green schoolyard to the general public?	This green schoolyard is **very accessible** to the general public and surrounding community after school hours.	12.5%	2
	This green schoolyard **has limited accessibility** to the general public and surrounding community	37.5%	6
	This green schoolyard is **not accessible** to the general public and surrounding community	50.0%	8

The final section of the survey included two questions focused on assessing the degree to which community members can access the green space available on these school campuses. Based on the results summarized in Table 5, the majority of Proposition 84 green schoolyard projects do not possess joint use agreements that allow community members to access the green schoolyard after school hours. Only 12.5 percent (n=2) of respondents indicated that their school site is open to the public after school hours. In conducting a deeper analysis via Qualtrics on these two survey responses, these two individuals worked on Washington Elementary School's green schoolyard project which has a joint use agreement.

Key Themes from Semi-Structured Interviews

Based on the information gathered and coded from the 12 semi-structured interviews, the following key themes emerged: what contributed to the success of each green schoolyard project, the challenges and procedural barriers faced, and potential solution. For a more in-depth breakdown of each main theme, its respective subthemes, and supporting evidence, see Table 4 below.

Table 6: Main Interview Themes About Procedural Equity		
This table provides the reader an overview of the five main findings from this study's interviews along with corresponding sub-themes and supporting evidence.		
Main Themes	**Sub-Theme**	**Supporting Evidence**
The Grant Application was Burdensome, but not as much as LAUSD	**Application Easier Than Implementation**	"[The grant application] was like, that was the easy part. The work was really keeping it viable."
	Time and Resource Burden	"The challenge is that it's actually quite a lot of work… it's like the grant industrial complex."
LAUSD Presented As A Key Roadblock Via Procedural Hurdles and Lack of Transparency	**Roadblocks Caused by Change in LAUSD Staff**	"The Acting Executive Director of Facilities … didn't need to honor any of the agreements because they were assigned by the previous Director of Facility Services. So, [LAUSD] began the process of backing out of all of the grants that were awarded under Prop 84."
	Mistreatment by Asset Management Staff	"He was disrespectful. He was abusive. He lied. This all had to be tolerated, and it was a very, very difficult situation and very hard on us. We spent for years of our time trying to make something happen, you know, and you don't get reimbursed for that."
	Expectations Around O&M	"The district wanted all of the not-for-profits to say they would do maintenance, on the projects for the life of the project or something like that, which, I mean… they would never expect a regular contractor to do that."
	Development Agreement	"For the first time, we were told we had to sign development agreements, and the development agreements were structured for for-profit contractors getting money for LAUSD which made absolutely no sense for a nonprofit."
Factors that Contributed To The Success of Implemented Green Schoolyard Projects	**Involvement of Non-Profit Partners**	" North East Trees, I mean, what a partner they are. I talked to them periodically, they're always checking in, and they will come back and help us with things we are doing and they will give us some guidance".
	Buy-In and Support from School District Staff	Contrast between schools that received support from their school district (Ben Franklin Magnet Elementary School and Washington Elementary School) and schools that were confronted with significant resistance and procedural barriers (Saturn Elementary School, Victory Boulevard, Eagle Rock Elementary School, and Hillcrest Elementary School)

Differences in Parent Involvement and Equity Considerations	Schools with Strong Parent Involvement	Examples of Ben Franklin Magnet Elementary School where parents and the school's foundation play an influential role in overseeing and funding the schoolyard's continued operations and maintenance. Example of Eagle Rock Elementary School where parents played influential roles in resisting LAUSD's procedural barriers and providing their professional expertise.
	Equity Considerations	Differing outcomes between Saturn Elementary School and Eagle Rock Elementary School- question of whether level of parent involvement was a contributing factor to the relative success of each school greening project.
Potential Solutions to State Funding Process	Technical Assistance	"We see technical assistance and capacity building being an engine for equity in communities and an opportunity to really operationalize equity goals"
	Reforming Grant Funding Model	"I think, to really note for the community-based organizations with the state, there's a real hindrance because the state doesn't do advance payments… So you have to hold the money or you have to be working with a partner who's willing to front you the money"

Theme 1: The Grant Application was Burdensome, but not as much as LAUSD

Based on the interviews conducted with green schoolyard projects, a majority of them claimed that the challenges their projects faced did not occur during the grant application process. Rather, **interviews reveal Proposition 84 green schoolyard projects predominantly faced barriers and challenges after funding had been awarded.** As expressed by Millet, "[The grant application] that was the easy part. The work was really keeping it viable" (Personal Communication, March 6, 2023). It is important to note that this finding does not mean that Proposition 84 grant applications were an overall easy process. Rather, interviewees shared these grant applications were time and resource intensive which one interviewee referred to as "the grant industrial complex" (Anonymous, personal communication, February 3,2023). Similarly, one interviewee reflected on how the burdens and challenges typical parents and community members experience could be easily avoided if "this money was just provided by the school district" (Anonymous, personal communication, February 3, 2023). This interviewee's comment raises critical questions regarding how school districts can play a larger role in securing funding for school greening and how they can alleviate existing procedural barriers moving forward. Interviewees' personal experiences ultimately point to a larger issue of how nonprofit

organizations often feel trapped in a perpetual cycle of searching for and needing to secure

funding. As stated by one interviewee, "If you don't support nonprofits staying alive, how do you

expect them to work?" (Anonymous, personal communication, February 25, 2023).

Theme 2: LAUSD As A Key Roadblock Via Procedural Hurdles and Lack of Transparency

Of the interview participants that worked on green schoolyard projects in LAUSD, four of the five indicated that their projects faced extensive procedural barriers created by the school district. These four interviewees worked on green schoolyard projects at Saturn Elementary School, Eagle Rock Elementary School, and Victory Boulevard Elementary School. Specific procedural barriers that these green schoolyard projects experienced related to: changes in LAUSD's leadership, disrespectful treatment from LAUSD's Asset Management Department, expectations around operations and maintenance in the Memorandum of Understanding (MOU), and the language used in the development agreement (see Appendix C, Table 5).

Roadblocks Caused by Change in LAUSD Leadership

Four of the five interviewees from green schoolyard projects in LAUSD argued they encountered challenges because of leadership changes in LAUSD's Facilities Services Division. According to Bevin Ashenmiller, who worked on Eagle Rock Elementary School's green schoolyard project and served on LAUSD's Bond Oversight Committee, LAUSD's Facilities Services Division underwent a change in leadership in the summer of 2012 right after Proposition 84 projects were awarded funding (Personal Communication, February 6, 2023). Prior to this change, interviewees shared Kelly Schmader, LAUSD's Chief Facilities Executive, provided letters of support to several Proposition 84 applications for green schoolyard projects (Millet 2023). However, when Schmader left LAUSD, "the Acting Executive Director of Facilities, Mark Hovattar… didn't need to honor any of the agreements because they were signed by the previous Director of Facilities Services. So, [LAUSD] began the process of backing out of all of the grants that were awarded under Proposition 84" (B.Ashenmiller, Personal Communication, February 6, 2023). Consequently, parents and nonprofit partners that worked on

Proposition 84 green schoolyard project faced extensive resistance and bureaucracy from

LAUSD for over four years.

Mistreatment by Staff Asset Management

In discussing the procedural challenges interviewees encountered at Proposition 84

school greening projects in LAUSD, all four interviewees described Asset Management

Department's relentless mistreatment of nonprofit partners. According to one interviewee who

has worked on school greening in Los Angeles for over thirty years, "There was no process. The

whole point of being with [Asset Management] was that they wanted to stop all nonprofits from

working at the schools. Instead of working [on the projects], we spent four years in meetings"

(Anonymous, personal communication, February 25, 2023). In addition to delaying the projects,

Asset Management tried to impose unreasonable requirements including requiring nonprofit

partners or the school community to cover the cost of 20 years of liability insurance for the

school site (Amanda Millet, personal communication, March 6, 2023). This requirement

threatened the viability of several green schoolyard projects and posed a significant barrier for

Title 1 schools. Ultimately, interviewees described their experiences with this department as

"abusive" and "an enormously disturbing process" that tried to wear down non-profits and deter

them from seeing their projects come to fruition (Anonymous, personal communication,

February 25, 2023; A. Millet, personal communication, March 6, 2023). See Table 6 in

Appendix C for additional testimonials of treatment by LAUSD Asset Management Department.

Expectations around O&M and the Memorandum of Understanding

Four of the five interviewees that worked on Proposition 84 green schoolyard projects at

LAUSD school sites also reported difficulties with obtaining a signed Memorandum of

Understanding (MOU) from the school district. An MOU is an agreement between the

implementing partner (non-profit organization, public agency, etc.) and LAUSD that describes

the agreed-upon roles and responsibilities of each party. These roles and responsibilities often

relate to financial responsibility and expectations around O&M of the green schoolyard project.

Proposition 84 presented unique points of contention between implementing partners and the

school district due to the ecosystem service benefits that Proposition 8 projects are supposed to

provide over 25 years (B. Ashenmiller, personal communication, February 6, 2023). According

to Ashenmiller, "the district wanted all of the not-for-profits to say they would do maintenance,

on the projects for the life of the project or something like that, which, I mean… they would

never expect a regular contractor to do that" (B. Ashenmiller, personal communication, February

6, 2023).What makes this requirement set by LAUSD especially outrageous is that LAUSD is

the entity that is responsible for the O&M of its school campuses. Given this context, the district

requiring LABT to be responsible for the continued O&M of Eagle Rock Elementary School's

green schoolyard project is contrary to LAUSD's policy and intentionally unfeasible for a non-

profit organization to take on.

Development Agreements

Lastly, these same four interviewees shared that LAUSD's development agreements

presented several complications for the nonprofits working on these green schoolyard projects.

According to LAUSD's current guidelines for third party greening projects, development

agreements are required to do any work on LAUSD campuses (LAUSD 2023). Based on the

experiences shared by these four interviewees, LAUSD's development agreements are written

and structured for for-profit contractors who want to bid on LAUSD projects and receive

LAUSD funds (Anonymous, personal communication, February 25, 2023). As a result, a lot of

the language that is used in LAUSD's development agreement does not specifically apply to

nonprofit partners working on greening projects at LAUSD school sites. Furthermore, the

development agreements required for Proposition 84 green schoolyard projects included

language around prevailing wage (A. Millet, personal communication, March 6, 2023). Due to

issues related to both the development agreement and the MOU, the implementing partner for

Eagle Rock Elementary School and Victory Boulevard Elementary School had to seek legal

counsel (B. Ashenmiller, personal communication, February 6, 2023). As a result of these

procedural challenges imposed by LAUSD and Asset Management, nonprofit partners on two of

LAUSD's eight Proposition 84 green schoolyard projects withdrew from the projects and

returned their awards to the state. Combined, these two schools lost over $1.68 million dollars in

Proposition 84 funding and over $500,000 in additional leveraged local funds (California Natural

Resources Agency 2022). **With these stakeholder's experiences in mind, LAUSD posed**

significant challenges for nonprofit organizations that served as implementing partners on

these green schoolyard projects.

Theme 3: What Contributed to The Success of These Green Schoolyard Projects?

      Through interviewing nine individuals across five different Proposition 84 green

schoolyard projects and three different school districts, the most common factors that contributed

to the success of a green schoolyard project includes **buy-in and support from school district**

staff and the involvement of non-profit organizations. While these are not all of the factors

discussed by interview participants, the roles and involvement of school districts and non-profit

organizations are particularly relevant when investigating issues of procedural justice.

      Buy-In and Support from School District Staff

      The most important factor that contributes to, and can ultimately decide, the success of a

green schoolyard project is the degree to which the project has buy-in and support from its

school district. When comparing the experiences of green schoolyard projects that were supported by their school districts (i.e.: Washington Elementary School and Ben Franklin Magnet Elementary School) with the experiences of green schoolyard projects that experienced little to no support from the school district (i.e. Eagle Rock Elementary School, Victory Boulevard, and Saturn Elementary School), there is drastic difference in the presence of procedural barriers and injustices between these two groups. Even when projects received extensive support from a wide range of influential local and regional stakeholders, this did not significantly factor into whether a green schoolyard project was ultimately implemented (M.Patrick, personal communication, January 11,2023).

Washington Elementary School's Compton Creek Natural Park Project exemplifies the importance of a collaborative school district and the role of cross-sectional partnerships. Out of the eleven Proposition 84 green schoolyard projects in Los Angeles County, Compton Creek Natural Park is unique in that it has a joint use agreement between Compton Unified School District and Los Angeles Conservation Corps. As a result, this green schoolyard project expands park space access to both students at Washington Elementary School and the surrounding community.

Another key example of successful collaboration and partnership between the school district, a nonprofit partner, and the school's community is Ben Franklin Magnet Elementary School. Based on interviews with several project participants at this green schoolyard project, Glendale Unified School District, Ben Franklin Elementary Foundation (the school's foundation), and North East Trees worked closely with one another to implement the green schoolyard project despite budget constraints.

Based on these project examples and the lived experiences of stakeholders that were interviewed, this study argues that the most important factor in determining the success of a green schoolyard project is the degree to which the project has buy-in and support from its school district. See Appendix G for an overview of each green schoolyard project.

Involvement of Non-Profits Partners

Another factor that positively impacts and contributes to green schoolyard projects is the involvement of non-profit organizations as implementing partners or technical advisors. Based on interviews with participants on Proposition 84 green schoolyard projects, non-profit organizations play essential roles throughout project development and help alleviate capacity constraints experienced by school administrators. Furthermore, non-profit partners with technical expertise in landscape architecture help school communities less versed in school design to ensure that the design of the schoolyard project is practical and fits the needs of the school community (G. Ballteria, personal communication, February 3, 2023). At Ben Franklin Magnet Elementary School, for instance, North East Trees supported Ben Franklin Elementary Foundation (BFEF), the project's implementing partner, with technical aspects of the grant application, the actual implementation of the green schoolyard project, and provided technical expertise on tree care during O & M (G. Ballteria, personal communication, February 3, 2023).[2] From serving as the implementing partner on the grant application and navigating school district bureaucracies to supporting those responsible for operations and maintenance, non-profit partners play a critical role in advancing and actualizing the movement to green schools. When equity-oriented non-profits and community partners are involved throughout the project

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[2] North East Trees is "a community-based, non-profit that designs and builds parks, and creates green space and water conservation projects throughout Los Angeles" (North East Trees 2019).

development process of green schoolyard projects, the technical expertise non-profits provide

can also support school communities in addressing these procedural barriers. Based on the

benefits that exist when nonprofits are involved on green schoolyard projects, it is critical that

LAUSD's actions and procedural barriers aimed at excluding non-profit partners are addressed.

Theme 4: Equity Considerations of Parent Involvement and Its Impact on Project Outcomes

While parent involvement played an influential role on several Proposition 84 green

schoolyard projects, it is worth discussing how differences in parent involvement across these

eleven projects contributed to different project outcomes. On one end, Eagle Rock Elementary

School and Ben Franklin Magnet Elementary School represent projects that received a

significant amount of support from parent volunteers and funding from their school's

foundations. The impact of parent involvement on Eagle Rock Elementary School's project can

be particularly seen by the role parents played in helping the project overcome procedural

barriers from LAUSD (A. Millet, personal communication, March 6, 2023). Likewise, parents at

Ben Franklin Magnet Elementary School play a critical role as they are responsible for the

continued operations and maintenance of the schoolyard.

While school foundations and parent involvement positively support green schoolyard

projects by providing additional funding and additional hands-on support that a school district

may not be able to offer, it is important to recognize that this is not a universally replicable

model due to socioeconomic barriers and income disparities. As exemplified by Saturn

Elementary School and Victory Boulevard Elementary School, interviewees shared that parents

at these schools were not able to as easily volunteer their time or donate money due to

socioeconomic and language barriers (Anonymous, personal communication, March 6, 2023;

M.Patrick, personal communication, January 11, 2023). When comparing the experiences and

outcomes of Saturn Elementary and Eagle Rock Elementary School's green schoolyard projects, two schools that experienced similar challenges with LAUSD, it is important to consider how the difference in parent involvement between these two schools may have influenced the final project outcomes. In discussing the existing disparity in parent involvement between these two green schoolyard projects, it is not to say that parents are at fault for not being involved on a green schoolyard project. Rather, this study argues that several institutional and procedural changes are needed to alleviate current procedural burdens so that the level of parent involvement at a green schoolyard project does not ultimately determine whether a project is successfully completed or not.

Theme 5: State Funding Processes and Potential Solutions

Based on this study's three interviews with individuals that oversee urban greening related grant programs at state agencies in California, there are several ways public agencies and grantors can help to alleviate and minimize procedural barriers from the top down. According to Walter Passermore, "when we're dealing with disadvantaged communities, they often don't have the full technical capacity of larger or more affluent cities… the government needs to fill some of these gaps" (personal communication, February 8, 2023). To fill these gaps, all three interviewees pointed to **technical assistance programs** and **reforming grant funding models** as concrete ways state agencies and grantors have key roles when it comes to advancing equity and creating more accessible avenues to accessing public funding.

Technical Assistance (TA)

Based on these interviews and existing literature, technical assistance (TA) encompasses a wide range of activities that build the long-term capacity and autonomy of individuals, organizations, and their communities through relationship building and knowledge sharing

(Kungu et al. 2020). In the context of accessing public funding and urban greening projects, interviewees described TA as focusing on either the grant application process, project development, or project implementation. During the grant application process, TA often includes but is not limited to support with grant writing, data analysis, mapping, and greenhouse gas emission quantification (Anonymous, personal communication, March 9, 2023). Comparatively, TA programs geared towards project implementation really vary from program to program. For CalFire's Urban and Community Forestry Grant Program, Walter Passermore described their technical assistance relating to more technical components that CalFire staff are experts on like forest management plans or conducting tree inventories (W. Passermore, personal communication, February 8, 2023). While one interviewee noted the benefit of one-on-one technical advisors in being able to cater to an organization's specific needs, all three interviewees shared that different models of TA offer different levels of support and that there is no one-size-fits-all solution to alleviate procedural barriers and building a community's capacity.

Through these interviews, it is apparent that technical assistance represents an important conduit to reducing structural, procedural, and administrative barriers during the grant application, planning, and implementation processes of a project for CBOs and non-profit organizations that have limited organizational capacity. At the same time, interviewees stressed that TA programs are only one part of the equation and additional efforts are needed to alleviate these barriers (E. Grassi, personal communication, February 10, 2023). As stated by one interviewee, "if we are only providing TA and capacity building, but we're having these really complex and difficult application processes for folks to go through, we are kind of both creating the problem and the solution for folks" (Anonymous, personal communication, March 9, 2023).

Grant Funding Model: Payment Model and Indirect Cost Rates

In addition to robust technical assistance programs, all three interviewees described how the way in which public agencies disperse grant funding can contribute to or alleviate procedural and administrative barriers for grantees. Currently, a majority of publicly funded grant programs utilize a reimbursement model to pay grant recipients; however, reimbursement models can represent a significant financial barrier for small nonprofits and CBOs.

> I think, to really note for the community-based organizations with the state, there's a real hindrance because the state doesn't do advance payments. So you have to have that money or you have to be working with a partner who's willing to front you the money. That can be really difficult" (E.Grassi, personal communication, February 10, 2023).

When grant programs only offer a reimbursement model for receiving payments, equity issues are at play because small organizations with limited financial capacity are burdened with having to front funds. At the same time, one interviewee shared that a caveat exists when grantors only offer advanced payments.

> "It's true that even in working with other agencies and some other programs that do offer advanced pay sometimes it ends up being more burdensome for grantees to set up this advanced pay model. This is because it means that they need to also be able to accommodate all those funds and that can be more complicated than the reimbursement process because documenting everything can be a little bit more complex. So, it really depends on organization to organization…" (Anonymous, personal communication, March 9, 2023).

Based on the pros and cons of reimbursement and advanced payment models, there is no one solution that will universally alleviate financial barriers to accessing public funding. For this reason, it is critical that public agencies and grantors offer flexibility for grantees where possible and try to accommodate the individual circumstances of tribes, small nonprofit organizations, and CBOs with limited capacity.

Policy Recommendations

Although there is a growing amount of funding available for greening projects at schools across California, school communities and non-profit partners often encounter numerous

challenges when trying to access this funding and implement green schoolyard projects. Findings

from the interviews synthesized above, along with an analysis of relevant scholarship and

research studies highlight the need for policy change at both the school district and state level.

The recommendations described below aim to prevent and reduce procedural barriers related to

accessing public funding and implementing green schoolyard projects.

LAUSD Specific Recommendations

Table 7: Policy Recommendations for LAUSD
1. **Adjust the language of development agreements and contracts** to accommodate nonprofit organizations working on green schoolyard projects at LAUSD campuses.
2. **Create a Facilities Services Oversight Committee** to ensure that the Facilities Services Division of LAUSD is held accountable and remains transparent with its decision-making.
3. **Create a School Greening Oversight Committee** to oversee LAUSD's commitment to school greening and related decision-making processes.

Development Agreement and Contracts

Firstly, LAUSD should modify its contract and development agreements for its

different audiences. Currently, LAUSD utilizes a one-size-fits-all system for its legal and

development contracts that is written solely for private contractors (i.e: construction firms). By

creating separate development agreements for non-profit partners, this will represent a small but

impactful change. Many of the individuals interviewed from LAUSD green schoolyard projects

indicated that the current language utilized in LAUSD's development agreements is written for

private contractors and not with non-profit partners in mind. Private contractors and non-profit

partners have different financial intentions and legal considerations when working on these

projects. As a result, it is difficult for non-profit partners to sign a development agreement that is

only written with private contractors in mind. If LAUSD wants to improve the quality and

environment of its school sites, collaboration is key, and collaborating with LAUSD is difficult

for non-profits when their circumstances are not considered in the legal paperwork they are

required to sign. While this policy change is small, it will help future non-profits working on

LAUSD green schoolyard projects from encountering the same frustrating and time-consuming

procedural barrier that several Proposition 84 green schoolyard projects struggled to navigate.

Facilities Services Oversight Committee

While LAUSD currently has a Bond Oversight Committee, it is imperative that

Jackie Goldberg, the President of LAUSD's Board of Education, establishes a Facilities

Services Oversight Committee. At LAUSD, a Facilities Services Oversight Committee would

be especially beneficial to ensure that the Facilities Services is held accountable and remains

transparent with its decision-making. Facilities Services Oversight Committees are not

unprecedented. In fact, Burbank Unified School District, Glendale Unified School District,

Berkeley Unified School District, Oakland Unified School District, and several other urban

school districts across California currently have facilities oversight or advisory committees to

ensure accountability and oversight of their school district's facilities related decisions and

policies. At Burbank School District, for instance,

> The purpose of the [School Facilities Oversight Committee] is to represent the interest of the
> community, staff, students, and parents in the school renovation and new construction as well as
> to inform the public of the district's fiscal responsibility in the appropriation and expenditure of
> all funds for construction, modernization, and/or renovation of District facilities. (*Bond Oversight
> Committee Bylaws*).

In the case of LAUSD, an oversight committee dedicated to the Facilities Services Division can

provide a check and balance to the Assets Management Department's power, settle disputes, and

investigate the division's wrongdoings to prevent past abuses from repeating themselves.

However, one common challenge that should be taken into consideration when creating oversight committees at LAUSD is the need to prevent individual interests from undermining school district-wide policies and decision-making processes.

School Greening Oversight Committee

Additionally, it is imperative that LAUSD creates an oversight committee dedicated to overseeing the school districts' commitment to school greening and related decision-making processes. In wake of LAUSD's recent commitment to greening 100 school campuses by 2035 and the rise in state funding for greening school campuses across California, this is an opportune time to establish an oversight committee to ensure that this commitment is implemented equitably and LAUSD is actively held accountable during the implementation of each project. Given the extensive challenges Proposition 84 green schoolyard projects faced due to the change in district leadership, it would be beneficial for a committee to handle disputes and hold the district accountable across administration changes. At Santa Cruz City School District, the purpose of their Green Schools Committee, which was created in 2015, is "to develop and recommend to the Board policies that meet State standards, lighten the district's environmental footprint and integrative environmental education and student participation in environmental initiatives using partnerships with environmental education and public and non-profit agencies" (Santa Cruz City School District 2022). SCCSD's Green Schools Committee is composed of a wide array of stakeholders that include community experts, parents, district staff, teachers, school board members, and students. At LAUSD, a school greening oversight committee would help to ensure public transparency and accountability as the school district plans and implements school greening projects and undergoes future changes in its administration.

LAUSD Structural Changes

Several organizational changes are needed within LAUSD to prevent history from repeating itself and hold LAUSD to its commitment to green its school campuses. In identifying the systems and processes that contributed to the challenges these green schoolyard projects encountered, LAUSD represents one institution that was overwhelmingly mentioned that contributed to these procedural barriers. While LAUSD has become more supportive of the green schoolyard movement in recent years and currently is pursuing greening initiatives with several non-profits as we speak, it is critical that current and future greening efforts in Los Angeles are aware of the historic adversarial role LAUSD has played in the past.

The concrete policy changes proposed above ultimately point to a larger systemic issue at LAUSD and similar large school districts: too many layers of bureaucracy and a lack of community input in administrative decisions. Based on interviews with individuals that faced extensive procedural barriers when working with LAUSD on Proposition 84-funded green schoolyard projects, the challenges individuals faced with LAUSD do not just reflect specific procedural flaws. Rather, these procedural flaws point to the need for a larger structural reform of LAUSD as an institution and the need for added systems of accountability and transparency to be set in place. If LAUSD were to change some of its legal processes to accommodate its non-profit partners that are instrumental in the green schoolyard movement and institute additional oversight committees, LAUSD will be better positioned to work alongside its non-profit partners in pursuit of the same end goal: children having access to green space and its extensive benefits at school.

Reforming How Non-Profits Access Public Funding

Simultaneously, policy changes are needed to make state funding processes more equitable and accessible for small non-profit organizations and disadvantaged communities. Based on existing literature and the recommendations set forth by interview participants, there are several ways in which state agencies and grantors can better center equity in the grant application process. In particular, state agencies ought to simplify grant applications, offer more flexible funding options, and create more robust technical assistance programs.

Table 8: Policy Recommendations to Create More Equitable State Funding Processes
4. **Simplify the Grant Application Process**: remove unnecessary application questions and requirements.
5. **Provide Flexible Funding Options** including advance payment and flexible indirect cost rate policies.
6. **Offer More Robust Technical Assistance** including one-on-one technical advisors, peer-to-peer learning spaces, and technical assistance during project implementation.

Simplify the Grant Application Process

To begin with, **it is critical that state agencies simplify grant applications by removing unnecessary requirements and application questions.** As revealed by this study's survey and interview results, completing a grant application is a time-consuming and resource-intensive process that requires technical expertise. Oftentimes, the burden of completing a grant application, especially for applications for state and federal funding, prevents disadvantaged communities and organizations with limited capacity (those that are most in need of funding) from being able to successfully access and benefit from these opportunities. By removing unnecessary application questions and requirements, grantors can help to ensure that more groups and communities are able to access these opportunities from the beginning.

Funding Models

Likewise, **state agencies must offer more flexible funding options for non-profits and CBOs including advance payment options and flexible indirect cost rates.** One way state agencies can better center equity and support under-resourced communities when developing grant programs is by offering flexibility around indirect cost rates. When state grantors establish limits on indirect costs, existing literature reveals that this policy leaves nonprofits with significant financial gaps to fill (Queenan and Bradach 2021). Based on existing literature on creating more equitable public funding models and the funding-related challenges raised by interview participants, it is essential that future comparable grant programs offer an advanced payment option rather than just reimbursement. For small non-profit organizations and CBOs, reimbursement models of grant funding create additional financial burdens and represent an additional administrative barrier to accessing critical public funding opportunities. According to Emi Wang, "Advanced payment enables grassroots and community-based groups to access critical funding opportunities, ensuring they do not continue to be left behind due to legacies of redlining and systemic racism" (S. of California 2022b). In comparison with a reimbursement funding model where grantees are required to have the cash flow to take on the costs associated with their grant activities, advanced pay models provide grantees with the funding upfront. While Governor Newsom signed AB 156 and AB 211 to create an advance payment model pilot program for six state grant programs in October of 2022, it is critical that more state agencies proactively adopt these equity solutions as well.

Create Robust Technical Assistance Programs

Lastly, grantors must create robust technical assistance programs that offer applicants targeted support and flexibility to further reduce procedural barriers. Technical

assistance programs are powerful tools for building an organization and community's capacity,

creating more equitable grant application and policy implementation processes, as well as

building trust between state agencies and local communities (Kungu et al. 2020). Depending on

the scope and goals of a grant program, a state agency's approach to TA can range from focusing

on capacity building, application assistance, and/or implementation assistance. The creation of

more robust TA programs will help state agencies to have an avenue to hear and identify future

issues of equity and access related to the grant application process. This is because TA programs

also serve as opportunities for mutual learning that can help State agencies identify procedural

barriers and injustices from individual grantees and their local communities. According to the

Strategic Growth Council,

> Application assistance TA may bring to light that certain communities face barriers to applying or competing for funding through a particular program…viewing TA as a one-way service provision rather than an opportunity for mutual learning and growth is a missed opportunity to improve State programs and policies and can ultimately slow the advancement of State goals (Kungu et al. 2020, 14).

In relation to the specific challenges survey and interview participants identified in this study,

future grant programs focused on the implementation of green schoolyard projects, or green

infrastructure projects more broadly, should offer grantees TA beyond the grant application
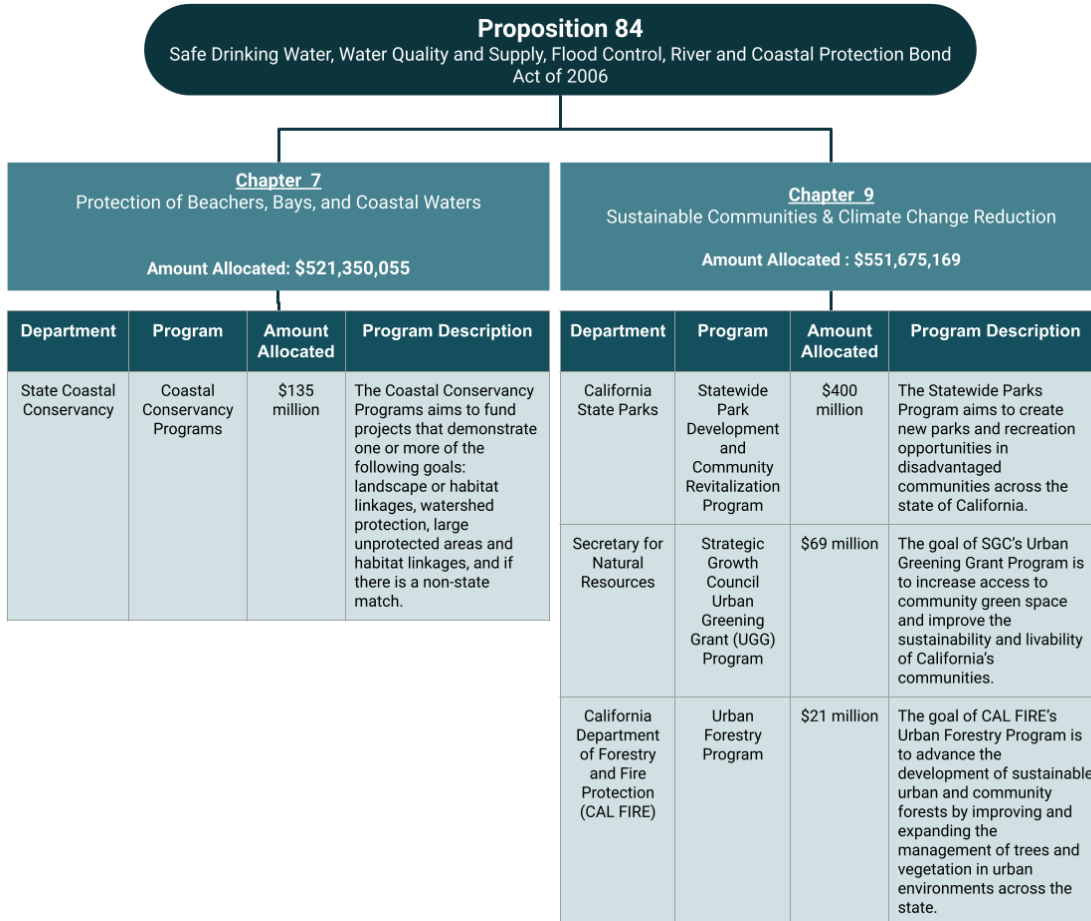
process.

Conclusion

Green schoolyard projects yield multiple benefits enhancing children's socio-emotional

wellbeing, building climate resilience, and creating healthier communities; however, the unique

geopolitical landscape of Los Angeles County presents several challenges that complicate

implementing and operating such projects. Overall, this study provided a broad overview of

procedural challenges project applicants experienced on green schoolyard projects that were funded by Proposition 84. Based on surveys and semi-structured interviews with project partners and involved project participants, Proposition 84 green schoolyard projects in LAUSD faced exponentially more procedural challenges than school projects located in other nearby school districts. In wake of this finding, it is important to note that this study has several limitations given its scope and size. Namely, this study was not able to interview anyone from LAUSD's Facilities Services Division due to LAUSD's External Review Board process. Similarly, this project faced challenges in successfully contacting and scheduling interviews with school staff, public agencies, and three non-profit organizations that served as project partners. In many cases, these challenges related to staff turnover limiting current institutional knowledge of these projects. Based on these limitations, future studies should endeavor to close this gap by allocating more than three months to interview project participants and dedicate more attention to interviewing school district staff. For these reasons, future research should look beyond Proposition 84-funded green schoolyard projects to understand the most critical barriers at play for schools in Los Angeles County and identify what the most prevalent barriers are at each school district in the region.

As emphasized throughout this study, the communities in need of green space in schools and environmental funding are often the communities with the most barriers stacked against them. In the case of Proposition 84 funding, the processes involved in completing a grant application and navigating the complex bureaucracies to implement these projects pose various accessibility and equity challenges. Based on the main barriers this study identified, it is essential that the movement to green school campuses in LA County is not siloed. Moreover, continued conversation and widespread resource sharing is needed to advance school greening projects and

help project partners on the ground to successfully leverage public funding and successfully implement green schoolyard projects with multiple benefits. As momentum continues to build on the ground, procedural and structural reforms are simultaneously needed at the state and federal level to ensure that environmental justice communities are able to access, inform, and ultimately benefit from public investments to green schoolyards

Appendix A: Overview of Proposition 84 Grant Programs

Proposition 84
Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006

Chapter 7
Protection of Beachers, Bays, and Coastal Waters

Amount Allocated: $521,350,055

Department	Program	Amount Allocated	Program Description
State Coastal Conservancy	Coastal Conservancy Programs	$135 million	The Coastal Conservancy Programs aims to fund projects that demonstrate one or more of the following goals: landscape or habitat linkages, watershed protection, large unprotected areas and habitat linkages, and if there is a non-state match.

Chapter 9
Sustainable Communities & Climate Change Reduction

Amount Allocated : $551,675,169

Department	Program	Amount Allocated	Program Description
California State Parks	Statewide Park Development and Community Revitalization Program	$400 million	The Statewide Parks Program aims to create new parks and recreation opportunities in disadvantaged communities across the state of California.
Secretary for Natural Resources	Strategic Growth Council Urban Greening Grant (UGG) Program	$69 million	The goal of SGC's Urban Greening Grant Program is to increase access to community green space and improve the sustainability and livability of California's communities.
California Department of Forestry and Fire Protection (CAL FIRE)	Urban Forestry Program	$21 million	The goal of CAL FIRE's Urban Forestry Program is to advance the development of sustainable urban and community forests by improving and expanding the management of trees and vegetation in urban environments across the state.

Appendix B: Tables of Green Schoolyard Projects

Table 9: Green School Yard Projects						
Project Name	**School District**	**Grant Program**	**Project Timeline & Status**	**Grant Application**	**Implementation**	**O & M**
Eagle Rock Elementary School	LAUSD	SGC Urban Greening Program	Completed	LABT, parents	Los Angeles Beautification Team (LABT), Studio-MLA	LAUSD
Victory Boulevard Elementary School	LAUSD	SGC Urban Greening Program	Completed	LABT Hollywood Beautification	Los Angeles Beautification Team (LABT)	LAUSD with LABT's support
Nevin Avenue Elementary School	LAUSD	Statewide Park Program	Vacant lot was purchased and necessary environmental mediation was completed. Community School Park is now under construction.	City of Los Angeles, Recreation & Parks,	City of Los Angeles, Recreation & Parks	LAUSD
Hillcrest Drive Elementary School	LAUSD	SGC Urban Greening Program	Never Implemented	LACC	n/a	n/a
Washington Elementary School	CUSD	Coastal Conservancy Program	Completed	MRCA	LACC; MIGcom	LACC
Saturn Elementary School	LAUSD	SGC Urban Greening Program	Never Implemented	Los Angeles Conservation Corps; Rings of Saturn;	n/a	n/a
Walnut Park Elementary School	LAUSD	SGC Urban Greening Program	Completed	Los Angeles County Department of Public Works (DPW)	Los Angeles County DW	LAUSD
Wilshire Park Elementary School	LAUSD	SGC Urban Greening Program	Completed	Koreatown Youth & Community Center (KYCC)	?	LAUSD

Ben Franklin Magnet Elementary School	GUSD	SGC Urban Greening Program	Completed	Benjamin Franklin Elementary Foundation; NorthEast	NorthEast Trees	Benjamin Franklin Elementary Foundation: paid plant caretakers and parent volunteers
Torrance Elementary School	TUSD	Urban Forestry Program (CalFire)	Completed	Unknown	Unknown	Unknown
San Fernando Sr. High School	LAUSD	Urban Forestry Program (CalFire)	Completed?	Tree People	Tree People, Students, and Teachers	Students

Appendix C: Additional Interview Quotes

Table 10: Selected Statements Describing Asset Management Department
"He dragged me around in meetings constantly and wasted my time. We had three lawyers. I mean, it was quite absurd. He was trying to wear us down and two other nonprofits left"
"He was disrespectful. He was abusive. He lied. This all had to be tolerated, and it was a very, very difficult situation and very hard on us. We spent for years of our time trying to make something happen, you know, and you don't get reimbursed for that."
"...the people who stopped us and hurt us and have been somewhat pushed us, they've been marginalized, but they're still there. They have not been removed. They still cause harm. And that is what is most disturbing."
"That was the first thing I was told when I met this guy. When I said 'the principals invited us,' he said 'This is our property. And the principals and the parents have no business, no business saying anything.' [LAUSD] is a business and it needs to change, but it's so big I don't see how it's going to change. Even with a good superintendent and a good school board, it's going to be very hard to change."

Appendix E: Survey Questions

General Questions About Individual Involvement

1. Before commencing with the survey, are you 18 years or older?
   a.
2. Which green schoolyard project did you work on?
   a. Fill-in response.
3. Please list the years you were involved working on this green schoolyard project.
4. At the time of your involvement on this project, what was your position? (Please select all that apply).
   a. Parent Volunteer
   b. Teacher
   c. School Administrator
   d. Community Member
   e. Non-Profit Partner
   f. Consultant
   g. Other: _____
5. How did you get involved with this green schoolyard project?

Application Related Questions

6. Were you involved in the grant application process for this green schoolyard project? If so, what did your involvement consist of? Select all that apply.

a. Served as Principal Investigator of the grant
b. Worked on the project's budget and project cost summary
c. Worked on the landscape design of the green schoolyard
d. Coordinated and participated in the site visit with the Strategic Growth Council
e. Participated in the interview portion of the grant application
f. Worked on project summary statement and project questions responses
g. Worked on permitting, CEQA, and/or operations and maintenance-related paperwork
h. Collected letters of support and collaboration letters
i. Other: (fill-in)

7. Approximately, how many individuals worked with you on the grant application?
    a. FILL IN RESPONSE: _____

8. Approximately, how many hours did it take you and your team to complete the SGC Urban Greening grant application?

9. Please rate your team's level of experience with grant writing and apply for grant funding.
    a. Rate on a scale from 1 (no experience) to 10 (highly experienced)

10. Please rate the involvement of the school site's PTA/Parent Associations in the application process of this green schoolyard project.
    a. Rate on a scale from 1 (no involvement) to 10 (highly involved)

11. How would you describe the level of communication and level of inclusiveness of those coordinating the green schoolyard project?

12. Please rate the involvement of external parties (non-profits, consultants, etc.) in the application process of this green schoolyard project.
    a. Rate on a scale from 1 (no involvement) to 10 (highly involved)

13. Please rate the involvement of community members in the application process of this green schoolyard project.
    a. Rate on a scale from 1 (no involvement) to 10 (highly involved)

14. What influenced you to leave this rating? Please elaborate on your perceptions and understanding of the involvement of community members in the application process of his green schoolyard project.

Implementation Related Questions

15. Please rate the involvement of the school site's PTA/Parent Associations in the implementation process of this green schoolyard project.
    a. Rate on a scale from 1 (no involvement) to 10 (highly involved)

16. Please rate the involvement of external parties (non-profits, consultants, etc.) in the implementation process of this green schoolyard project.
    a. Rate on a scale from 1 (no involvement) to 10 (highly involved)

17. Please rate the involvement of community members in the implementation process of this green schoolyard project.
    a. Rate on a scale from 1 (no involvement) to 10 (highly involved)

Final Questions

18. Please list any colleagues and partners that worked on this green schoolyard project that you think should be contacted for this study.

19. Would you be willing to participate in a 20 to 30-minute follow-up virtual interview?
    a. Yes
    b. No
20. If so, please provide your email address or phone number below to be contacted for a follow-up interview.

Appendix F: Interview Questions

For Grant Administrative Staff:

1. What position do you hold at the Strategic Growth Council?

2. Please describe your involvement in the application review processes for the SGC's Urban Greening Grant Program.

3. Please describe the SGC's process of selecting project applicants to receive funding.

4. Who is involved in this decision-making process?

5. What metrics and scoring criteria does the Strategic Growth Council use when assessing project applicants that applied for funding Proposition 84's Urban Greening Grant Program?

6. The Urban Greening grant application had 20 different required application components. Did the SGC provide technical assistance and/or any resources to assist project applicants with limited organizational capacity?

7. How does the SGC consider issues of equity in its application processes?

8. During your time at the SGC, what kinds of equity challenges have you seen encountered by project applicants?

9. Based on the applications that the SGC has reviewed related to Proposition 84, to what extent do you think procedural hurdles limit the number and kind of project applicants submitted?

10. The Urban Greening Grant application process included a site visit component. What is the purpose of the site visit and what does the SGC assess during these visits?

For Survey Respondents: I will use this time to ask follow-up questions based on the respondents' answers to the survey.

1. Based on your survey responses, you indicate that the school's PTA was highly involved in the application process for this green schoolyard project. What did their involvement look like and what effects did this have on the final outcomes of the green schoolyard project?

2. What challenges did you and your colleagues face during the application process?

3. Based on your survey responses, you indicated that your school site had limited organizational capacity when applying for the Urban Greening grant application. What aspects of the SGC's application process did you find to be the most challenging and time-consuming?

4. Please describe the implementation process of this school greening project. Once the school site received the grant funding, what kind of monitoring, reporting, and environmental compliance requirements were expected of you?

5. If your school site received technical assistance or support from external parties (consultants, non-profit partners), how did their involvement alleviate any capacity limitations? What did their technical assistance involve?

6. Since receiving funding and implementing the green schoolyard project, did your site receive adequate funds for operations and maintenance? If not, please elaborate.

7. Since adding a green schoolyard to your school site, what changes have you seen amongst your student body and greater community?

8. Is there anything else you'd like to share with me about the process or final result?

Appendix G: Profiles of Green Schoolyard Projects

● **Eagle Rock Elementary School**

About the Project: Eagle Rock Elementary School's green schoolyard project was overseen and implemented by the Los Angeles Beautification Team with support and collaboration from Studio MLA and a committed group of parent volunteers. Through Proposition 84 funding, Eagle Rock Elementary School was able to replace a large portion of its asphalt play area with permeable surfaces, bioswales, and native landscaping with shade trees. A more in-depth overview of the project can be found here.

● **Victory Boulevard Elementary School**

About the Project: Victory Boulevard Elementary School's greening project was overseen and implemented by the Los Angeles Beautification Team. With Proposition 84 funding, the green schoolyard project was able to transform 2,000 square feet of asphalt schoolyard into a sustainable outdoor living classroom and reading garden. A video of the project can be found here.

● **Saturn Elementary School**

About the Project: The Saturn Elementary Community School Park project was never implemented using Proposition 84 funding due to extensive procedural barriers created by LAUSD. The implementing partner for the project was the Rings of Saturn, a non-profit organization created by local community residents dedicated to supporting the school and adding green space in their community through this urban greening project. In wake of the barriers created by LAUSD and years of delays in project implementation, residents mobilized and created a Change.org petition to convince LAUSD's then Superintendent George McKenna to break ground on the project ("Supporter Comments Change.Org"). The petition received 200 signatures and 66 comments (see Table 11 below). LAUSD's inaction is particularly exemplified in a ten-year long email chain that was provided to this study with the consent of a former Saturn Elementary School parent and neighborhood council member. The email chain between Saturn Elementary School parents and LAUSD's Assets Management Department documents a pattern of vague explanations to community stakeholders about the lack of progress on Saturn Elementary School's green schoolyard project (Anonymous, personal communication, March 7, 2023). Despite community stakeholders organizing and actively pressuring LAUSD, Saturn Elementary School never implemented its Proposition 84 green schoolyard project in part due to the extensive procedural burdens that the project's implementing partner had to endure and LAUSD's lack of support. The email chain also reveals several discrepancies in the reported status of Saturn Elementary School's green schoolyard project. Assets Management's most recent correspondence in the email chain reveals that "the greening project was completed last year in 2022" (LAUSD Staff, personal communication, March 6, 2023). However, three interviewees from this study shared that Saturn Elementary School had lost its Proposition 84 funding due to the implementing partner pulling out of the project due to LAUSD's extensive procedural challenges. As a result, confusion remains around the status of Saturn Elementary School's school greening project and whether it was funded through its original Proposition 84 award.

Table 11: Comments from Saturn ES Change.org Petition
"We have so many people in our community that would benefit from this. Let's get it done!"
"This is my neighborhood and I have three little boys - ages 2, 4, 6 who need this!"
"This concrete jungle needs green space."
"This is in my neighborhood and all of our schools deserve a quality playground with green space!"
"We need a park in our neighborhood!!"

"Families need safe places for children to play and enjoy the environment to be healthy."

"Children need green space to play in and trees clean pollution from the air. Saturn Elementary is almost all asphalt and is in a neighborhood lacking park areas to play. They have been working on this grant for years! It is needed and they deserve it."

"This was my home school and I moved away because of the grounds, and the lack of green space around there. This would make such an immense difference for the kids and the neighborhood."

"This is money that has already been awarded! Let's not let it be squandered, these students and this community desperately need green spaces."

"These community park projects are important to our communities and our schools. Kids need green space to play and learn, and there is far too little of it in our neighborhood. The community needs projects like this that help make the school a valued part of the community and draw their support."

- **Nevin Avenue Elementary School**

About the Project: The Nevin Avenue Elementary School Park has been led and implemented by the City of Los Angeles Recreations and Parks (RAP) Department. Proposition 84 funding for this project went towards acquiring and remediating a 0.26 acre vacant lot adjacent to the school campus. According to preliminary designs of the school park project, this green schoolyard project will construct a new entry plaza, a picnic area, a children's playground, fitness zone, botanical learning garden, walking trains, an interactive land and water demonstration garden, and an indoor/outdoor learning/community center. According to current documents published by City of LA RAP, Nevin Avenue's green schoolyard project has faced considerable environmental regulatory and mitigation challenges related to asphalt removal. This is because the vacant lot was previously a plating facility causing the soil and ground to be severely contaminated with metals including cyanide (Board of Recreation and Park Commissioners, 2022).

- **Hillcrest Drive Elementary School**

About the Project: Hillcrest Drive Elementary School's green schoolyard project was overseen by the Los Angeles Conservation Corps. Unfortunately, this green schoolyard project was never implemented due to barriers and challenges created by LAUSD. As a result, this project lost $1.22 million in funding that was supposed to replace a large area of asphalt with low maintenance grasses, gardens, and stormwater capture features along with community accessibility (California Natural Resources Agency 2022).

- **Washington Elementary School**

About the project: The Compton Creek Natural Park at George Washington Elementary School changed an abandoned, muddy field into a three-acre restored park that includes a walking path,

exercise equipment, and natural habitat for native plants and animals. It also includes an underground cistern with a 127,000-gallon capacity that will capture rainwater that can be used to irrigate the park. While Washington Elementary School's project did face delays during implementation, it is important to note these delays were not because of pushback from or procedural barriers created by Compton Unified School District (CUSD) (L. Jennings, personal communication, February 6, 2023). Photos of the project design have been attached below.

Image courtesy of MigCOM

- **Walnut Park Elementary School**

About the project: The Walnut Park Elementary School Greening project was overseen by the LA County Department of Public Works. On August 17, 2010, LA County PW secured Urban Greening grants from theState Natural Resources Agency for the project. The project constructed a community garden, outdoor smart garden learning center, walking path, bioswales, and planted trees and drought-tolerant landscaping around the premises of the school.

- **San Fernando Sr. High School**

About the Project: At San Fernando Sr. High School, Tree People applied for and implemented a Campus Forestry Project that total $7,500. Based on email correspondence with a science teacher at San Fernando Sr. High School that was involved in the project planted several dozen trees on the school grounds with help from student and teacher volunteers. (Anonymous, individual correspondence, February 8, 2023).

- **Wilshire Park Elementary School**

About the Project: According to the KYCC, "The project involved removing over 4,000 square feet of asphalt and many perennials that required extensive watering. The new garden includes 23 native shade trees and 220 shrubs, flowers, and grasses. A dry riverbed and catchment basins were added for rainwater capture. Combined, these elements will reduce the urban heat island effect, improve air and water quality, and conserve water and energy resources" (KYCC 2017).
Image courtesy of KYCC

- **Torrance Elementary School**

About the Project: At Torrance Elementary School, Proposition 84 funding reportedly contributed to an extensive campus tree planting project. However, email correspondence with the Director of Facilities at Torrance Unified School District reveals his department has no recollection of the project having occurred.

- **Ben Franklin Magnet Elementary School**

    About the project: Ben Franklin Magnet Elementary School's greening project was implemented by the Ben Franklin Elementary Foundation with help from nonprofit partner North

East Trees. Ben Franklin Magnet Elementary School's green schoolyard project removed 45,000 square feet of asphalt and transformed it into a meadow.play area with vegetated bioswales and rain gardens. Through Proposition 84 funding, this project also expanded the school's existing edible garden, added drought resistant trees, and added lots of native plants. Attached below are before and after photos courtesy of George Ballteria from North East Trees.

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