

WATTS RISING

2024 PROGRESS REPORT ON IMPLEMENTATION OF THE
TRANSFORMATIVE CLIMATE COMMUNITIES PROGRAM GRANT



UCLA

Luskin Center
for Innovation

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Disclaimer

The UCLA Luskin Center for Innovation appreciates the contributions of the aforementioned agencies. This report, however, does not necessarily reflect their views nor does it serve as an endorsement of findings. Any errors are those of the authors.

For More Information

www.innovation.luskin.ucla.edu

Cover image: Student volunteers planting trees for the Watts Cool Schools - Green Schools project at Compton Ave Elementary School in August 2023 (Photo credit TreePeople).

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EXECUTIVE SUMMARY

THE TRANSFORMATIVE CLIMATE COMMUNITIES PROGRAM

(TCC) is an innovative investment in community-scale climate action with potentially broad implications. Launched in 2017 by the California State Legislature, TCC funds the implementation of neighborhood-level transformative plans that include multiple coordinated projects to reduce greenhouse gas (GHG) emissions. The program is also designed to provide an array of local economic, environmental, and health benefits to disadvantaged communities, while minimizing the risk of displacement. TCC empowers the communities most impacted by pollution to choose their own goals, strategies, and projects to enact transformational change — all with data-driven milestones and measurable outcomes.

The California Strategic Growth Council (SGC) serves as the lead administrator of TCC. At the time of this report, SGC has awarded 15 TCC Implementation Grants across five rounds of funding to 15 communities throughout the state (ranging from \$9.1 million to \$66.5 million per site).¹

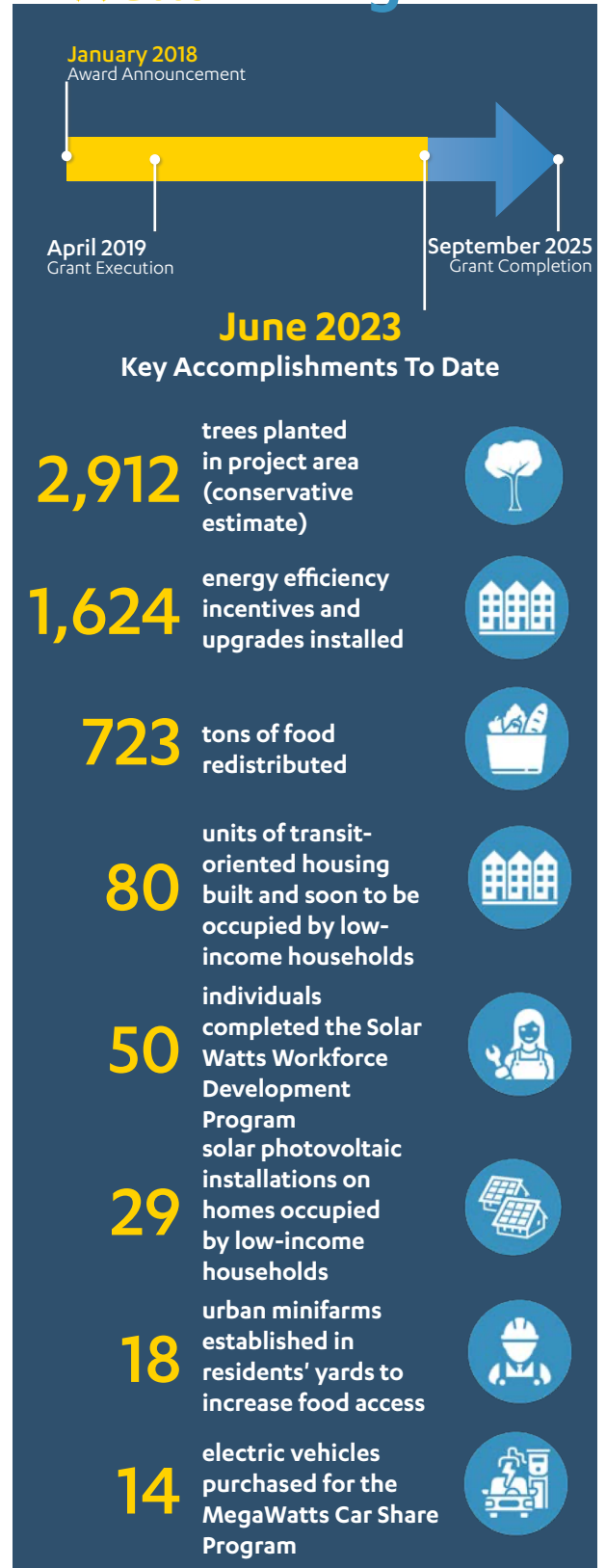
The UCLA Luskin Center for Innovation (LCI) serves as the lead evaluator for six communities that have received TCC Implementation Grants across the following funding rounds: all three Round 1 sites (Fresno, Ontario, and Watts), one Round 2 site (Northeast San Fernando Valley), one Round 3 site (Stockton), and two Round 4 sites (South Los Angeles and Stockton). LCI researchers are working with these communities to document their progress and evaluate the impacts of TCC investments.

This progress report is the final in a series of five that provides an overview of the key accomplishments and estimated benefits of TCC-funded activities in Watts, collectively referred to as Watts Rising.² This specific report documents progress through the end of (FY) 2022-2023, which overlaps with about 14 months of post-award planning (January 2018 to March 2019), and 52 months of grant implementation (March 2019 through June 2023). Even though this is the final progress report authored by UCLA Luskin Center for Innovation (LCI), Watts Rising carries on, with implementation milestones that are expected to continue through September 2025.

¹ For the most current information about TCC rounds, both current and future, visit: <https://sgc.ca.gov/programs/tcc/>

² For annual reports that LCI has produced for other TCC sites, visit: <https://innovation.luskin.ucla.edu/tracking-groundbreaking-climate-action/>

Watts Rising





Watts Cool Schools -Green Schools event at Compton Ave Elementary in August 2023. Photo credit: TreePeople.

Watts Today

Watts is a vibrant neighborhood of about 40,000 residents in the southeastern part of the City of Los Angeles. The neighborhood has a long history of community organizing and is home to the Watts Towers and other homegrown arts and cultural landmarks. Watts is also located near many sources of air pollution, including the intersection of Interstates 110 and 105, rail and truck routes for the Port of Los Angeles, and the flight path of the Los Angeles International Airport. In addition, Watts residents face limited access to fresh food, affordable housing, and sufficient tree canopy. These and other public health concerns in the neighborhood are being exacerbated by climate change and more extreme heat days. The Watts TCC grant seeks to address these environmental and economic challenges through a suite of coordinated projects, including developing low-carbon transportation options, constructing affordable housing, planting thousands of trees, and supporting other amenities that respond to community needs.

Watts Rising

In 2017, the Housing Authority of the City of Los Angeles (HACLA) led efforts to submit a TCC grant. The grant was designed to support the following environmental and public health goals: (1) reduce local sources of air pollution, (2) improve public health outcomes and address health dis-

parities, (3) prevent displacement and its impact on physical and mental health, (4) mitigate greenhouse gas (GHG) emissions sources and exposure to pollution, and (5) create safe and secure public spaces. Furthermore, the following economic goals were identified: (1) access to job training, (2) access to high-quality jobs and careers, (3) support and expansion of local businesses and organizations, (4) help youth identify and prepare for careers in GHG-reduction fields, and (5) empower and educating residents to advocate for greater equity and provision of municipal services.

HACLA hosted public meetings attended by residents and other key stakeholders³ to solicit input on project prioritization in support of the identified goals for the TCC grant. Engagement efforts resulted in Watts Rising, a community-driven plan and initiative to transform a 2.2-square-mile area of the neighborhood through a suite of projects and plans to reduce GHGs while also providing local environmental, health, and economic co-benefits. In early 2018, SGC awarded \$33.3 million to the Watts Rising Collaborative as part of TCC. Watts Rising also leverages \$169.8 million in outside funds to support their vision. Along with the Cities of Fresno and Ontario — two other sites awarded Round 1 TCC funding — Watts is one of the first areas in the country to pilot a community-led, multi-benefit, and place-based climate change mitigation program that specifically targets the needs of low-income households.

³Stakeholders as used in this report carries multiple meanings, including but not limited to: residents within the project area who have benefited or stand to benefit from grant-related activities, individuals who work or do business in the project area, project partners who are directly involved in grant-related work, and any other individuals who participated in grant-related activities.

Projects

Watts Rising includes 23 projects, 17 of which are funded by TCC dollars and six of which are funded by leveraged dollars. The TCC-funded and leveraged projects work

synergistically to achieve the broad goals of TCC. The TCC-funded and leveraged projects are consolidated into seven distinct project types below:

TCC-funded Projects



Affordable Housing and Sustainable Communities — Funds the construction of an 80-unit affordable housing development. Increasing the density of housing aims to reduce vehicle miles traveled, along with lowering housing costs and travel costs for Watts residents. This project will also plant trees that sequester carbon and provide shading benefits. Additionally, this program will provide bicycle safety and education courses that promote clean modes of transportation.



Food Waste Prevention and Rescue — Funds the development of a food rescue program that redistributes unsold food from a local produce market to the community at regular events, increasing the accessibility of fresh produce for consumption and reducing the amount of food waste. Rescued food that is unable to be redistributed is turned into compost that can be used locally for gardening and urban greening applications. This process helps to divert the amount of organic material sent to landfills, where it decomposes in the absence of oxygen and releases methane, a potent GHG.



Low-carbon Transportation — Increases the fleet of electric vehicles (EV) for use by Watts residents, offsetting the miles driven by cars that run on fossil fuels.



Rooftop Solar and Energy Efficiency — Funds two projects aimed at installing no-cost rooftop solar systems and energy efficiency measures for residential homes. The projects will enhance local renewable energy generation, reduce the need to generate electricity via fossil fuels, and lower energy costs for property owners.



Transit Operations — Electrifies the bus fleet that travels through the project area, and increases the frequency of bus service. The transit operation project aims to improve transit ridership and reduce vehicle miles traveled.



Urban and Community Forestry — Funds the planting of 2,250 trees. As the trees mature, they will sequester carbon and shade nearby buildings, which should reduce the demand for electricity for cooling purposes. The additional tree coverage will also reduce the urban heat island effect on hot days and absorb stormwater on rainy days.



Urban Greening — Funds the planting of 465 additional trees and makes bicycle and pedestrian improvements. Similar to urban and community forestry projects, urban greening projects sequester carbon through maturing trees and provide shading benefits. Bicycle and pedestrian improvements aim to reduce car travel by improving alternative transportation options.

Leveraged Projects



Affordable Housing and Sustainable Communities — Funds the construction of a 135-unit affordable housing development. A 31,299-square-foot grocery store has also been constructed nearby. Together, these investments increase the density of the neighborhood and accessibility of local shopping options, which aim to reduce vehicle miles traveled, along with lowering housing costs for Watts residents. Additionally, these two projects will plant 380 trees.



Urban Greening and Active Transportation — Funds the planting of 346 trees and other native plant species. Additionally, these projects make bicyclist and pedestrian improvements to over a mile of street in Watts. These projects sequester carbon through maturing trees and provide shading benefits. Bicycle and pedestrian enhancements aim to reduce car travel by improving alternative transportation options.

Transformative Plans

TCC is unique from other state-funded GHG-reduction programs because it requires grantees to develop three transformative plans to maximize the benefits of the previously described project and to minimize unintended harms. Specifically, grantees were required to develop a community engagement plan, workforce development plan, and displacement avoidance plan. Respectively, these

three plans are designed to ensure that TCC investments reflect the community's vision and goals, bring economic opportunities to disadvantaged and low-income communities, and minimize the risk of gentrification and displacement of existing residents and businesses. In the case of Watts Rising, these three plans have been adapted in the following ways:



Community Engagement Plan

- » **Create** the Watts Rising Community Advisory Group, the advisory body for Watts Rising, composed of:
 - Key stakeholder representatives
 - Watts residents
 - Business owners
 - Community leaders
- » **Conduct** multimedia communications
- » **Coordinate** individual project outreach
- » **Deploy** an annual survey



Workforce Development Plan

- » **Connect** residents with training and educational opportunities that provide them with new skills, including:
 - Training 30 residents on electric vehicle topics
 - 40 paid training on solar installations basics
- » **Place** residents in employment opportunities on TCC and leveraged projects, including:
 - 150 construction and clean energy jobs



Displacement Avoidance Plan

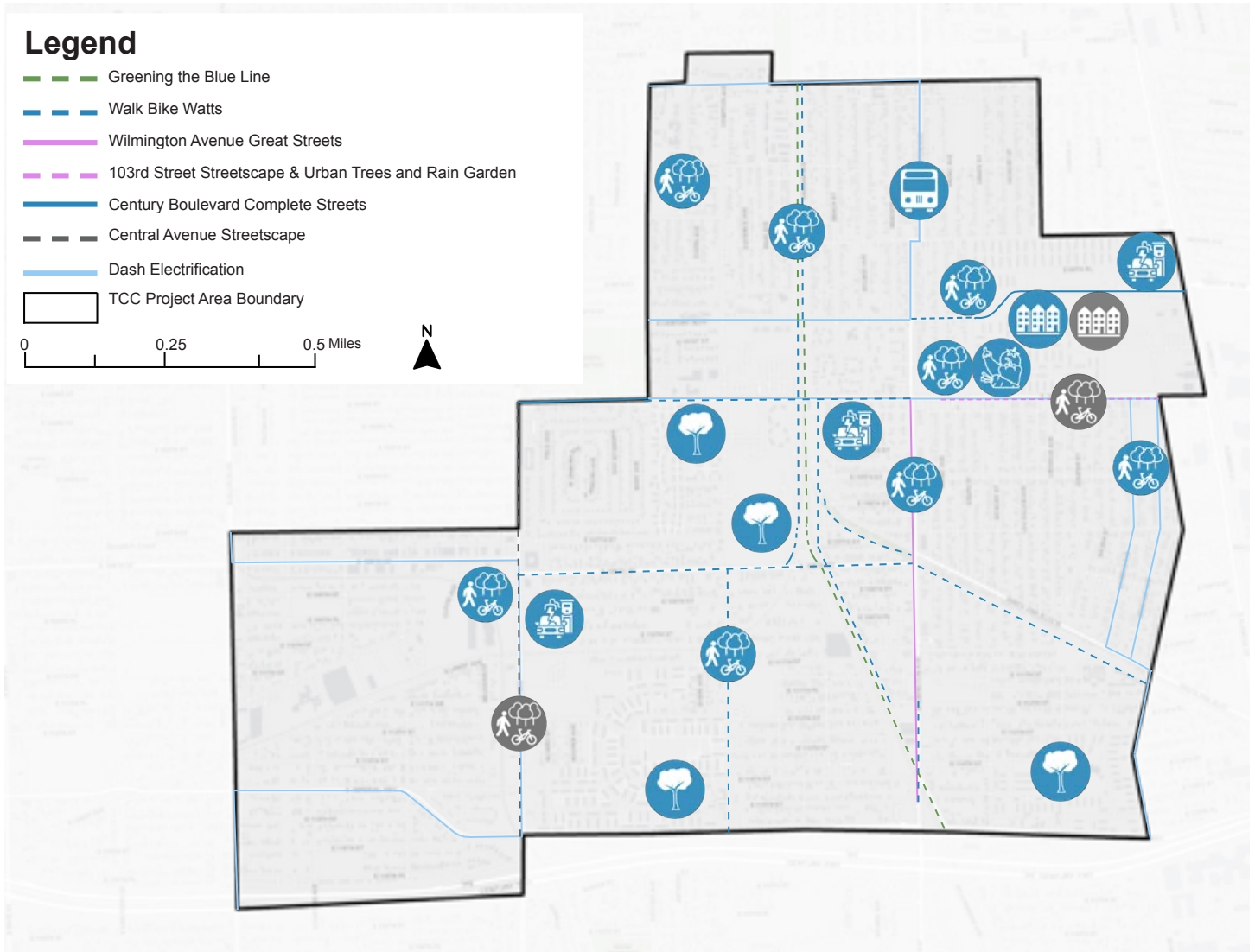
- » **Produce** and preserve affordable housing in part by:
 - Constructing new housing
 - Facilitating policy interventions to make affordable housing more accessible
 - Promoting housing preservation finance tools and housing units that are available
- » **Protect** tenure of existing residents, in part by convening at least three workshops on each of the following topics:
 - Financial literacy
 - Homeownership and foreclosure prevention
 - Resident organizing
 - Tenant leadership training
 - Tenants' rights
- » **Retain** local small business community, in part by convening at least three workshops on each of the following topics:
 - Contracting opportunities for small businesses
 - Small business assistance and access to capital services

Project Area

The Watts Rising project area was configured to bring investment to one of the state’s most disadvantaged neighborhoods. All census tracts within the project area boundary are defined as disadvantaged according to CalEnviroScreen 3.0 (about 65% of the project area ranks within the top 5%). The project area boundary was also

drawn to connect key assets within those census tracts. **Figure 1** shows where TCC-funded projects and leveraged projects will be located within the project area. See **Appendix 1, page 84** for a more detailed map that includes assets located within the project area.

Figure 1. Project Area Map With Locations of Projects*



*See the previous two pages for information about what each project icon represents. This map does not include statewide projects or plans (e.g., rooftop solar installations, community engagement, etc.).

Figure credit: UCLA Luskin Center for Innovation

Anticipated Benefits

Watts Rising is slated to bring a number of benefits to residents of the TCC project area. The infographic below highlights some of these benefits, grouped by indicator type. This list includes outputs, outcomes, and impacts from TCC-funded projects and does not include those from leveraged projects. Project outputs refer to the tangible goods and services that Watts Rising will deliver by the end

of project implementation. These outputs are expected to result in many positive outcomes and impacts. Outcomes refer to changes in stakeholder knowledge, attitudes, skills, behaviors, practices, or decisions. Impacts refer to changes in environmental or human conditions that align with the objectives and goals of TCC.

Project Outputs*



2,715 new trees that will provide shade for buildings and sidewalks



81 new housing units (80 affordable)



10 new buses powered by electricity



108 tons of edible food rescued per year



40 residents trained in solar photovoltaic installation



3.8 miles of bike sharrows constructed



173 kW of solar power on single-family homes



30 residents trained on electric vehicle-related topics



1.4 miles of buffered bicycle lanes and cultural trail improvements built

Outcomes and Impacts*



31,778,586 miles of averted travel in passenger vehicles annually



\$8,741,303 in travel cost savings for residents that shift their travel modes



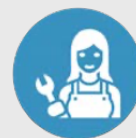
61,732 metric tons of avoided GHG emissions**



29,915,562 gallons in avoided stormwater runoff



\$3,602,265 in energy cost savings for solar photovoltaic and street tree beneficiaries



153 direct jobs, **70** indirect jobs, and **113** induced jobs***

* Project outputs presented here may reflect scope modifications to individual projects during the course of grant implementation. However, estimated outcomes and impacts have not been updated during the course of grant implementation and are still tied to the original anticipated project outputs.

** All GHG emissions are reported as metric tons carbon dioxide equivalent.

*** All jobs are reported as full-time equivalent (FTE) and only represent jobs supported by TCC funding.

Harder to quantify, but nevertheless important, is the leadership and collaboration capacity that will be created in Watts over the course of the TCC implementation process. This capacity could lay the foundation for many other funding and action-oriented opportunities that

leverage the TCC projects and plans to bring additional environmental, health, and economic benefits to Watts. In addition, lessons learned and best practices from Watts TCC could inform local climate action and investments well beyond the TCC project area.

Cumulative Accomplishments



Watts Rising Collaborative conversing with community at Earth Day April 2023. Photo credit: Watts Rising Collaborative

Much has happened after the announcement of Watts’ TCC award in 2018. From that announcement through the close of the 2022-2023 fiscal year (June 30, 2023), a period of five and a half years, project partners have made considerable progress toward implementing an ambitious, unprecedented climate action initiative.

Key accomplishments of Watts Rising project partners are described in this section according to the phase in which they occurred. Specifically, accomplishments are divided between: (a) post-award consultation, a period of planning and preparation between the award announcement and grant execution; and (b) grant implementation, which formally began in April 2019, when HACLA executed its grant agreement with the California Strategic Growth Council. In light of the challenges of the pandemic, the grant implementation period for Round 1 grantees has been extended (from June 2023 to the latest amendment of September 2025).

Post-award Consultation (January 2018 – March 2019)

Formalized Partnerships and Governance Structure

HACLA formed a number of partnerships in the community to facilitate TCC implementation. Many of these community partnerships were formed during the TCC application process and since then grant execution has been institutionalized in the form of the Watts Rising Community Advisory Group and Working Groups.

The Watts Rising Community Advisory Group is the coun-

seling body that provides oversight and consultation to the myriad of Watts Rising partners. The Community Advisory Group includes Watts residents, businesses, and other community-based organizations. Starting with the kick-off meeting in May 2019, the Community Advisory Group holds monthly meetings which are open to the public.

Watts Rising’s Working Groups are organized around the following similar project themes: 1) community engagement, 2) data, 3) displacement avoidance, 4) city oversight, and 5) workforce development (facilitated by Jordan Downs Forward Working Group). Members focus on implementing one or more work plans within those five thematic areas (see **Appendix 3, page 87**, for more details on this structure).

Grant Implementation (April 2019 – June 2023)

Strengthened Community Capacity

Community capacity is broadly defined as the ability of local communities to develop, implement, and sustain their own solutions to societal challenges, including but not limited to climate change. Through investment in both physical and social capital, TCC has strengthened community capacity in Watts, as evidenced by several case studies that can be found later in the report. For example, the Watts Street Team, a group of local residents paid to lead community outreach, has empowered locals to build their leadership, public speaking and team-working skills (see **page 35** for the perspectives of two Watts Street Team members). Similarly, North East Trees’ urban greening

projects hire directly from the Watts community, exposing residents to the nuts and bolts of planting and maintaining trees, as well as building trust with residents who are skeptical of the benefits of street trees. For a case study on how two Watts residents, now part of North East Trees Watts Crew, have gained urban forestry skills for future careers in environmental conservation, see [page 37](#).

Advanced Construction of New Affordable Housing

As of June 2023, construction of Jordan Downs S2 affordable housing and sustainable communities project, known as Sky at Jordan Downs, was 90% complete. This means that 80 low-income households will have secure and affordable housing located near transit and recreational amenities, which for many tenants is a transformational change from their previous housing situation. For detailed information about Jordan Downs S2, see [page 53](#).

Procured Buses That Can Run on Renewable Energy

TCC funds paid for the incremental cost of upgrading compressed natural gas buses to fully battery electric ones. For this project, 10 battery-electric buses and five charging stations will be installed. Unlike conventional natural gas which is derived from fossil fuel sources, renewable energy is sourced from waste management facilities such as landfills, waste water treatment plants, and food digesters. When bus manufacturing is complete, the 10 buses will be put into service along existing transit routes that service the TCC project area, thereby reducing GHG emissions from local transit operations.

Launched the MegaWatts Car Share Program

In June 2023, the MegaWatts Car Share Program was soft launched to Watts residents. Seven Tesla Model Ys and sev-

Key Accomplishments Through June 2023

Affordable Housing Development

- » **80** units of transit-oriented housing built and soon to be occupied by low-income households
- » **1** new playground installed for children

Transportation Decarbonization

- » **10** battery electric buses in inspection phase soon to be driven along the project area
- » **5** chargers to be installed for the 10 battery electric buses to be charged

Expanded Mobility Options

- » **27** users registered via smartphone application downloads for the MegaWatts Car Share Program
- » **14** EVs were purchased and ready for deployment through the MegaWatts Car Share Program

en Chevy Bolts were purchased for the program. Service started in Freedom Plaza, one of the TCC leveraged projects; see [page 83](#) for more information. Additionally, five chargers were installed at Freedom Plaza and 10 at the Watts Labor Community Action Committee facility in Watts to expand community access to electric vehicle infrastruc-



Watts Rising's MegaShare Program Soft Launch in Freedom Plaza on June 2023. Photo credit: Green Commuter



Community members at a food distribution event at MudTown Farms in December 2023. Photo credit: MudTown Farms

ture.

Built Electric Charging Infrastructure for Residents

With respect to electric infrastructure, there were nine Level-2 electric vehicle (EV) chargers and six DC fast chargers installed within the project area. In total, there has been 130,257 kWh of actual energy usage from EV charging infrastructure so far. The host site, Jordan Downs Retail Center, a leverage project, was completed in October 2020. TCC leveraged funds constructed the grocery store portion of the center which will provide additional fresh food options. To learn more about Watts Rising leveraged projects, see **page 77**.

Brought Solar Power to Low-income Households

Through the end of FY 2022-2023, project partners installed 29 solar photovoltaic systems across the project area, totaling 88 kilowatts of DC-rated power. All systems installed benefit low-income homeowners, thereby providing financial relief in the face of rising energy costs. For a case study on two families who have obtained such relief, see **page 39**.

Redirected Healthy Food From Landfills to Residents

Project partners at MudTown Farms redistributed 471 tons of food directly to community members and 252 tons through partner agencies, such as churches and community-service organizations. This has served 15,186 residents in the community. Food that cannot be redistributed is used for compost and by the end of FY 2022-2023 about 41,015 pounds of green waste was utilized. For a case study about

Key Accomplishments Through June 2023

Electric Vehicle Charging Infrastructure

- » **130,257** kWh of energy used from new EV charging infrastructure, displacing about 338,668 miles traveled in a conventional vehicle fueled by gasoline
- » **15** EV chargers installed (9 Level-2 EV chargers and 6 DC fast chargers installed)

Renewable Energy Access

- » **29** solar photovoltaic installations on properties occupied by low-income households, totaling about 88 kilowatts of DC-rated power

Healthy Food Access

- » **15,186** participants served in MudTown Farms’ food redistribution program
- » **723** tons of food redistributed directly by MudTown Farms and through partner agencies
- » **21** tons of green waste were composted
- » **18** mini urban farms established

MudTown Farms' impact on the Watts community during the pandemic and beyond, see [page 41](#).

Retrofitted Homes to Use Less Energy and Water

Project partners also ramped up energy and water efficiency installations during the reporting period. A total of 37 single-family units were retrofitted through FY 2022-2023. Over 1,600 different types of energy efficiency measures have been installed thus far. These improvements include low-flow faucets and shower heads, LED lighting, and more. These measures will reduce energy cost burdens for low-income families and result in lower monthly household utility bills.

Increased Urban Tree Cover

Milestones for TCC-funded tree planting efforts include the planting of over 2,900 trees throughout the project area. Additionally 1,000 trees have been distributed to residents within the project area. Another project accomplishment is North East Trees' conclusion of their Greening Public Housing Project, successfully planting 200 trees at three HACLA properties. Additionally, an additional 200 trees were planted at the 1103rd Street/Rosa Parks Station of the LA Metro A Line. All these added tree coverage will replace existing concrete and therefore provide thermal comfort during extreme heat days.

Strengthened Community Outreach and Engagement

Outreach and community engagement efforts commenced both site wide and at the project level. A key component of the Watts Rising initiative is involving community members in projects. The Watts Rising Community Engagement Plan and each TCC-funded project

Key Accomplishments Through June 2023

Energy and Water Saving Measures

- » **1,624** types of energy efficiency measures installed
- » **37** households provided with free energy and water efficiency upgrades

Urban Forestry

- » **2,912** trees planted within the project area (conservative estimate)
- » **1,010** volunteers trained on tree planting and tree care
- » **787** fruit trees distributed to Watts residents that signed pledges to plant and care for their fruit trees
- » **77** tree care and maintenance trainings held



Watts Crew planting trees at Gonzaque Village Nature Day September 2022. Photo credit: UCLA Luskin Center for Innovation



Community members giving feedback regarding Century Gateway Park. Photo credit: Watts Rising Collaborative

specifies activities to involve the community throughout the grant period. These include hosting events, organizing educational workshops, and recruiting residents as volunteers, trainees, or hired staff. These events had almost 800 attendees combined.

In 2021, the Watts Rising collaborative created a Street Team, comprising Watts residents, tasked with conducting community outreach, providing consultation for individual projects as needed, and organizing community events to encourage broader community involvement. The Street Team consists of six individuals working as independent contractors with HACLA, with strong connections to a variety of different constituencies in the Watts community including schools, community gardens, youth development, and public housing. For a case study on two members of the Watts Street Team’s work around the community see **page 35**.

Every month, Watts Rising hosts a public community forum to listen to partners regarding the ongoing development of each specific project. The forum is also a space for residents to voice their opinions, ideas, and thoughts about each project. Through FY 2022-2023, these meetings were conducted both in-person and online. These monthly meetings generate an average of 40 participants per online meeting.

Connected Residents With Training and Employment

Guided by Watt Rising’s Workforce Development Plan, project partners offer a range of job training opportunities in fields that are needed for climate resilience. These industries include EV maintenance and solar panel installation. All training has been completed for GRID Alternatives’ workforce program, resulting in 50 residents graduates. Of

Key Accomplishments Through June 2023

Community Engagement

- » **900** community members attended a total of 11 events regarding the development and design of Century Gateway Park and Freedom Tree Park
- » **506** residents contacted directly regarding Solar Watts and energy efficiency projects
- » **9** residents serve on the Watts Rising Community Advisory Group
- » **6** residents serve on the Watts Rising Street Team to disseminate information regarding projects and plans

Workforce Development

- » **50** participants completed the program and were awarded GRID Alternatives’ Installations Basics Training certificates
- » **9** local youth trained and hired by North East Trees
- » **8** participants hired through TCC job placement activities
- » **6** Youth Yardners trained to garden at MudTown Farms
- » **1** Watts Car Share Associate hired from the community

these, eight have been employed through TCC job placement activities. Also, partners will finalize the Mega Watts Project and hire local residents for program maintenance and training. Since the program's soft launch, one car share associate has been hired from the community.

Additionally, there have been various job opportunities available for Watts community residents. As such, nine local youth have been trained and hired by North East Trees to expand the urban tree canopy for affordable housing projects and throughout the project area. Similarly, six youth "yardners" were trained to garden at MudTown Farms.

Coordinated Efforts to Mitigate Displacement

Watts Rising's Displacement Avoidance Plan (DAP) is unique from the other transformative plans in that it is not directly funded by Watt's TCC Implementation Grant. However, it has formalized coordination among TCC partners around this critical issue. It is important to note that project partners are coordinating their efforts to address the *indirect* effects of TCC investments on displacement, as TCC projects will not directly displace any residents or businesses (all new infrastructure will be located on vacant land or within the public right of way).

The Watts Century Latino Organization (WCLO) is the community partner's of the Watts Rising's DAP in coordination with Los Angeles Mayor Karen Bass' Office. WCLO has a long standing relationship with the Watts community through tenant's rights workshops, financial planning workshops, and community empowerment for multiple decades. WCLO provided a number of workshops and

Key Accomplishments Through June 2023

Residential Displacement Avoidance

- » **200** community members utilizing case management sessions and/or referrals
- » **5** workshops held to inform residents about affordable housing opportunities with 700 residents invited
- » **4** tenants rights education classes held in both English and Spanish with about 128 participants
- » **4** financial education workshops in both English and Spanish with about 56 participants
- » **2** homeownership and foreclosure prevention workshops held in both English and Spanish with about 77 participants

Commercial Displacement Avoidance

- » **247** business connected to supporting resources and programs
- » **226** participants attended 17 small business workshops
- » **212** businesses participated in Vermont Slauson Economic Development Corporation microenterprise and entrepreneurial training



Watts Century Latino Organization hosts Navidad en el Barrio December 2022. Photo credit: Watts Rising Collaborative



Watts Rising Collaborative's Healthy Harvest event on November 2021. Photo credit: Watts Rising Collaborative

trainings on topics including legal services, tenant resources and rights, resident organizing, homeownership, foreclosure prevention, as well as financial education and literacy. To learn more about the work of WCLO and the personal impact it has had on a Watts homeowner, see **page 31**.

In addition to protecting residents, Watts Rising DAP partners provided a variety of workshops for small businesses. For example, contracting opportunities, available services and opportunities, such as the Business Source Center's and Macedonia Community Development Corporation's business training, and microlending opportunities. To learn more about two small businesses in Watts, see **page 33**.

Responded to the COVID-19 Pandemic

After the COVID-19 pandemic hit, project implementation had to adapt. Watts Rising project partners creatively modified their project activities to support the community through this challenging period and adhere to public health guidelines. For example, food recovery and waste reduction partner MudTown Farms ensured that food distribution followed COVID-19 public health safety guidelines by pre-bagging produce and distributing it through a drive-through process. Similarly, project partners were able to engage community members at tree planting and care events with social distancing and face masking measures when Los Angeles County's Safer-At-Home measures lifted.

Watts Rising used social media to disperse information about ongoing food distribution, COVID-19 testing and vaccination sites, and other available health resources. Similarly, most project partners shifted to an online format for community engagement meetings.

The pandemic shifted methods of achieving project de-

Key Accomplishments Through June 2023

Pandemic Responses

- » Various food recovery and waste prevention partners distributed fresh produce to alleviate food insecurity at the start of spring through summer 2020.
- » Watts Rising project partners, even those whose focus is not food recovery, teamed up to distribute food to the community by providing COVID-19 public health safety guidance to those collecting food.
- » Majority of project partners moved their community engagement meetings online and used them as a platform to disseminate critical public health information about the pandemic.
- » Urban greening, and energy and solar project partners used social media to inform community members about free trees, solar panels, and energy efficiency resources.

liverables, and there were a few projects delayed due to COVID-19. Most notably, Los Angeles Department of Transportation's E-DASH bus manufacturing has been heavily stalled due to factory closures.

More notable implementation pivots are detailed on the right. For more details on how Watts Rising responded to COVID-19, see individual project and plan profiles in the following chapters, as well as stories from project partners on **page 36**.



Former Governor Jerry Brown in Fresno signs a package of climate change bills in September of 2016, including Assembly Bill 2722, which was authored by Assembly member Autumn R. Burke (at right) and established the Transformative Climate Communities Program. Photo credit: The Fresno Bee

The Vision Behind TCC

THE TRANSFORMATIVE CLIMATE COMMUNITIES PROGRAM (TCC) was authorized in 2016 by Assembly Bill 2722 (authored by Assemblymember Autumn R. Burke). The bill's intent is to fund the development and implementation of neighborhood-level transformative climate community plans that include multiple coordinated greenhouse gas (GHG) emissions-reduction projects that provide local economic, environmental, and health benefits to disadvantaged communities.³ The program is part of California's broader suite of programs, referred to as California Climate Investments, that use revenues from the state's Cap-and-Trade Program to fund projects that reduce GHG emissions. TCC is novel because of three signature elements: 1) its place-based and community-driven approach toward transformation; 2) robust, holistic programming via the integration of diverse strategies; and 3) cross-sector partnerships. The authors of this report are not aware of such a comprehensive, community-driven, and place-based climate action program anywhere else in the world.

³ AB 2722, Transformative Climate Communities. 2016. Web. February 2017. Retrieved from: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2722

As a place-based program, TCC requires that all grant applicants identify a project area that will be a focus of their respective proposal. Proposals must be borne out of a robust community engagement process that brings together residents and stakeholders toward the development of a shared vision of how to invest TCC funds. The program's emphasis on comprehensive community engagement helps ensure that proposals are based on a deep understanding of a community's needs and assets, thereby maximizing the benefits that TCC dollars bring to existing residents in a selected site.

As a holistic program, TCC integrates a wide variety of GHG-reduction strategies, such as sustainable land use, low-carbon transportation, renewable energy generation, urban greening, and waste diversion. With these strategies in mind, TCC grantees develop site-specific projects, such as transit-oriented affordable housing, expanded bus service, rooftop solar installations, tree plantings, and food waste recovery. These GHG-reduction projects are modeled after existing California Climate Investment (CCI) project types, but TCC is novel in that it unifies them into a single, place-based initiative. In addition to integrating various CCI project types, TCC also requires TCC sites to incorporate crosscutting transformative plans, ensuring that TCC investment is underpinned by meaningful community engagement, provides direct economic benefits to existing residents and businesses, and enables these stakeholders to remain in their neighborhood. Moreover, grant recipients are expected to use TCC dollars in concert with other funding sources to achieve the community vision for the grant.

Lastly, the program emphasizes cross-sector partnerships by requiring applicants to form a coalition of organizations that would carry the implementation of the community vision. To ensure that the implementation will deliver on the community's vision, all applicants are required to have an oversight committee that consists of project partners, community members, and local community-based organizations. The diverse partnerships, robust governance structure, and aforementioned transformative plans help ensure transparency and accountability for TCC invest-

ments, all while building community capacity in neighborhoods with long histories of disinvestment, thereby helping to reverse that trend.

Program Administration

SGC awards TCC grants and administers the program in partnership with the Department of Conservation (DOC), with collaboration by other state agencies. SGC staff coordinates efforts with partnering state agencies and works with the California Air Resources Board (CARB) and DOC on program guidelines, evaluating applications, preparing agreements, monitoring agreement implementation, and program reporting.

Program Awards

There are three types of grants administered through TCC: (1) Implementation Grants; (2) Planning Grants; and (3) Project Development Grants. SGC awards Implementation Grants to sites that have demonstrated a clear, community-led vision for how they can use TCC dollars to achieve program objectives in their communities. SGC also awards Planning Grants to fund planning activities in disadvantaged communities that may be eligible for future TCC Implementation Grants and other California Climate Investment programs. Project Development Grants are a new pilot grant program developed by SGC in response to the gap between Planning and Implementation Grant funding identified by prospective applicants, and fund communities' climate and community resilience goals.

Each TCC grant cycle is funded slightly differently. Rounds 1, 2, and 3 were funded through California's Cap-and-Trade auction proceeds via the California Climate Investment's Greenhouse Gas Reduction Fund, whereas funding for Rounds 4 and 5 was allocated through the State General Fund's Climate Budget.

Since the launch of the program in 2016, there have been five rounds of awards. Each round of awards is tied to a different fiscal year (FY) of state funding and comprises a unique mix of grant awards by number and amount. **Table 1** provides an overview of all five rounds of TCC awards that have been distributed through FY 2022-2023.

Table 1: Overview of TCC Grants Through FY 2022-2023

Site Location	Round (Fiscal Year)	Grant Type	Funding Amount
Fresno	Round 1 (FY 2016-2017)	Implementation	\$66.5 million
Ontario	Round 1 (FY 2016-2017)	Implementation	\$33.25 million
Los Angeles - Watts	Round 1 (FY 2016-2017)	Implementation	\$33.25 million
Coachella Valley	Round 1 (FY 2016-2017)	Planning	\$170k
East Los Angeles	Round 1 (FY 2016-2017)	Planning	\$170k
East Oakland	Round 1 (FY 2016-2017)	Planning	\$170k
Gateway Cities	Round 1 (FY 2016-2017)	Planning	\$170k
Moreno Valley	Round 1 (FY 2016-2017)	Planning	\$94k
Richmond	Round 1 (FY 2016-2017)	Planning	\$170k
Riverside	Round 1 (FY 2016-2017)	Planning	\$170k
Sacramento - Franklin	Round 1 (FY 2016-2017)	Planning	\$170k
Stockton	Round 1 (FY 2016-2017)	Planning	\$170k
West Oakland	Round 1 (FY 2016-2017)	Planning	\$170k
Northeast Los Angeles - Pacoima/Sun Valley	Round 2 (FY 2018-2019)	Implementation	\$23 million
Sacramento - River District	Round 2 (FY 2018-2019)	Implementation	\$23 million
Bakersfield	Round 2 (FY 2018-2019)	Planning	\$200k
Indio	Round 2 (FY 2018-2019)	Planning	\$200k
McFarland	Round 2 (FY 2018-2019)	Planning	\$200k
South Los Angeles	Round 2 (FY 2018-2019)	Planning	\$200k
Tulare County	Round 2 (FY 2018-2019)	Planning	\$200k
East Oakland	Round 3 (FY 2019-2020)	Implementation	\$28.2 million
Riverside - Eastside	Round 3 (FY 2019-2020)	Implementation	\$9.1 million
South Stockton	Round 3 (FY 2019-2020)	Implementation	\$10.8 million
Pomona	Round 3 (FY 2019-2020)	Planning	\$200k
Porterville	Round 3 (FY 2019-2020)	Planning	\$200k
San Diego - Barrio Logan/Logan Heights	Round 3 (FY 2019-2020)	Planning	\$200k
Richmond	Round 4 (FY 2021-2022)	Implementation	\$35 million
South Los Angeles	Round 4 (FY 2021-2022)	Implementation	\$35 million
South Stockton	Round 4 (FY 2021-2022)	Implementation	\$24.2 million
San Diego - Spring Valley	Round 4 (FY 2021-2022)	Planning	\$300k
Karuk Tribe	Round 4 (FY 2021-2022)	Planning	\$300k
Monterey - Pájaro Valley	Round 4 (FY 2021-2022)	Planning	\$300k
Chicken Ranch Rancheria and Jamestown	Round 4 (FY 2021-2022)	Planning	\$217k
Tulare County	Round 4 (FY 2021-2022)	Planning	\$300k
Hoopa Valley Indian Reservation	Round 4 (FY 2021-2022)	Planning	\$300k
Wiyot Tribe	Round 4 (FY 2021-2022)	Planning	\$300k
Bakersfield	Round 5 (FY 2022-2023)	Implementation	\$22 million
Pomona	Round 5 (FY 2022-2023)	Implementation	\$22 million
Coachella	Round 5 (FY 2022-2023)	Implementation	\$22 million



California Strategic Growth Council staff, CalEPA secretary, CalTransportation secretary, and Governor’s Office representatives and Watts Rising stakeholders at a site visit. February 2023. Photo credit: @SGC | CA Strategic Growth Council on Twitter

Site Location	Round (Fiscal Year)	Grant Type	Funding Amount
San Diego	Round 5 (FY 2022-2023)	Implementation	\$22 million
San Diego	Round 5 (FY 2022-2023)	Planning	\$300k
Fresno County	Round 5 (FY 2022-2023)	Planning	\$300k
Paramount	Round 5 (FY 2022-2023)	Planning	\$300k
Riverside County	Round 5 (FY 2022-2023)	Project Development	\$4 million
Santa Barbara County	Round 5 (FY 2022-2023)	Project Development	\$1.1 million
Mariposa County	Round 5 (FY 2022-2023)	Project Development	\$1.1 million
Mendocino County	Round 5 (FY 2022-2023)	Project Development	\$2.5 million



UCLA Luskin Center for Innovation staff presenting on annual reports at the hybrid Watts Rising Public Forum. July 2023. Photo credit: UCLA Luskin Center for Innovation

Evaluating the Impacts of TCC

In 2017, SGC contracted with the University of California, Los Angeles and the University of California, Berkeley (“UCLA-UCB evaluation team”) to draft an evaluation plan for assessing the progress and outcomes of Round 1 TCC Implementation Grants at the neighborhood level. In November 2018, the “UCLA-UCB evaluation team” published an evaluation plan to serve as a guide for evaluating the three TCC Round 1 grants.⁴

After the publication of the Round 1 evaluation plan, the “UCLA-UCB evaluation team” entered a second contract with SGC to serve as the third-party evaluator in all three Round 1 sites. As of the writing of this report, the UCLA Luskin Center for Innovation (LCI) serves as the sole contractor in that role.

For later rounds of the TCC program, grantees were able to contract directly with a third-party evaluator of their choosing, including but not limited to the LCI evaluation team. To date, the LCI evaluation team is under contract to serve as the evaluator for the Round 2 grant in the Northeast Los Angeles (Pacoima), the Round 3 grant in Stockton, and the Round 4 grants in South Los Angeles and Stockton.

LCI’s evaluation plans for later rounds of TCC closely follow the evaluation plan from Round 1, with some site-specific modifications to reflect each site’s unique set of projects,

goals, and priorities for data tracking. These modifications were made in close consultation with the project partners in each TCC site.

Contract Period for Evaluating TCC Round I

The LCI evaluation team was initially contracted to provide evaluation technical assistance services to Round 1 sites from April 2019 through the end of December 2023. However, the COVID-19 pandemic, supply chain shortages, inflation, and other factors caused significant delays that pushed back the implementation timelines of Round 1 TCC grantees beyond the time period that the LCI evaluation team had set aside for closeout data collection and analysis.

To allow for more time for data collection, SGC extended the LCI evaluation team’s contract period through June 2025. This extension will allow the LCI evaluation team to complete some, but not all, of the evaluation activities that were anticipated in the 2018 evaluation plan. The following subsections provide a summary of the evaluation activities that the LCI evaluation team had originally proposed, and the extent to which those activities are still possible under the current contract period for Round I evaluation.

Conceptual Framework for Evaluating TCC

Logic models are at the heart of the LCI evaluation team’s conceptual framework for evaluating TCC and thus greatly informed all of the evaluation plans that LCI has produced. Logic models illustrate the interim steps that must occur

⁴The UCLA Luskin Center for Innovation and UC Berkeley Center for Resource Efficient Communities. 2018. *Transformative Climate Communities Evaluation Plan: A Road Map for Assessing Progress and Results of the Round 1 Place-based Initiatives*. Retrieved from: http://sgc.ca.gov/programs/tcc/docs/20190213-TCC_Evaluation_Plan_November_2018.pdf

for a project plan to realize its intended goals. Within the context of TCC, these steps are defined as follows:

- » **Inputs:** The investment dollars and leveraged funds that support TCC
- » **Activities:** The work of TCC grantees and co-applicants
- » **Outputs:** The products and services that TCC projects produce and deliver (the basis for many of the implementation accomplishments reported throughout this document)
- » **Short-Term Outcomes:** Changes in stakeholders' knowledge, attitude, and skills
- » **Intermediate Outcomes:** Changes in stakeholders' behaviors, practices, or decisions
- » **Impacts:** Changes in environmental or human conditions that align with the objectives of TCC (i.e., GHG reductions; public health and environmental benefits; and economic opportunities and shared prosperity)

The LCI evaluation team translated the latter four steps in the logic model framework into indicators that could be quantified and tracked for the purposes of program evaluation. The TCC Round 1 evaluation plan summarizes the final list of indicators adopted by SGC for Fresno, Ontario, and Watts.⁵

Indicator tracking responsibilities were partially split among the LCI evaluation team and the TCC grantees. In general, the grantees committed to tracking all output-related indicators, while the LCI evaluation team committed to tracking most outcome- and impact-related indicators. The LCI evaluation team was funded to perform this function for the first five years of grant implementation (i.e., through the end of the FY 2022-2023). Despite the contract extension, the LCI evaluation team is not funded to continue this function within its current scope of work.

Quantitative Methods for Evaluating TCC

To quantitatively assess the effects of TCC, the LCI evaluation team proposed two different forms of comparison: (1) before-and-after TCC investment; and (2) with-and-without TCC investment. Together, these two modes of comparison will provide the most reliable assessment of what changes can be attributed to TCC investment.

For the before-and-after comparison, the goal of the evaluation was to collect enough longitudinal data to construct a five-year trend line before and after grant implementation. A time series such as this would allow the evaluator to discern whether indicators were already trending in a positive or negative direction before TCC investment

began. For the with-and-without comparison, the goal was to compare trends in TCC sites to trends in a set of control sites that did not receive TCC investment. This approach would allow the LCI evaluation team to isolate the effect of TCC from larger social, economic, and environmental forces that may also be acting on indicators. To support this effort, the LCI evaluation team identified control sites that were similar to TCC sites along a number of dimensions, including socioeconomic demographics, climate, and pollution (as demonstrated by CalEnviroScreen scores).⁶

Due to the previously discussed delays in TCC project and plan implementation, the LCI evaluation team will be unable to conduct a before-and-after comparison (and by extension, a with-and-without comparison) within its contract period. Nonetheless, the LCI evaluation team is committed to providing an updated time series of the quantitative data that has been collected thus far. This time series can be found in **Appendix 8, page 94**. When possible, the data is provided at the following geographic scales:

- » **TCC project area:** The neighborhood boundary identified by the TCC grantees in which all TCC investments will be located. In some cases, a cluster of census tracts that have more than 10% area overlap with the TCC project area boundary will be used for indicator tracking purposes instead of the actual project boundary. This is the case for all indicators that rely on American Community Survey (ACS) data, which cannot reliably be apportioned to fit the actual TCC project area boundary. See **Appendix 6, page 91**, for a list of census tracts that will be used as a proxy for Watts' TCC project area boundary.
- » **TCC control sites:** A cluster of census tracts that match TCC census tracts along a number of dimensions (e.g., demographics, climate, pollution burden, etc.) but that did not receive TCC investment. Collecting before-and-after data for the control sites will help control for external forces that may also be acting on indicators of interest within TCC sites. See **Appendix 7, page 92**, for a list of census tracts that will be used as control sites for evaluating the impacts of TCC investment in Watts.
- » **County:** The county in which TCC sites are located (i.e., Los Angeles County for Watts). County-scale measurements are helpful for understanding the degree to which TCC investments are addressing social equity indicators (e.g., income, employment, housing costs, etc.) at a regional scale. If, for example, employment slightly increases within TCC sites but a much greater increase

⁵ Ibid.

⁶ See the TCC Round 1 Evaluation Plan (Appendix 3.2) of the TCC Round 1 Evaluation Plan for a summary of the methods used to identify control sites: http://sgc.ca.gov/programs/tcc/docs/20190213-TCC_Evaluation_Plan_November_2018.pdf

is observed regionally, then the economic gap between TCC sites and nearby communities has not been sufficiently addressed.

- » **State:** The state in which TCC sites are located (i.e., California). Like county-scale measurements, statewide measurements are helpful for understanding the degree to which TCC investments are addressing social equity concerns, but at a broader scale.

Qualitative Methods for Evaluating TCC

Many of the benefits of TCC cannot fully be captured by the quantitative methods previously described. For example, improvements in well-being, community capacity to tackle new challenges, and collaboration across diverse stakeholder groups are difficult to describe in numerical terms. Thus, to document some of the more nuanced effects of TCC, the LCI evaluation team is posing questions directly to TCC stakeholders about their lived experiences vis-a-vis surveys, interviews, and focus groups.⁷

For Round 1 sites, the LCI evaluation team prioritized its qualitative data collection resources to examine the aspects of TCC that are particularly novel relative to other grant programs. Specifically, the LCI evaluation team is collecting qualitative data about the roll out of the three transformative plans and the Collaborative Stakeholder Structure. Additionally, the LCI evaluation team will also collect qualitative data from residents of TCC-funded affordable housing projects, which concentrate multiple GHG-reduction strategies into a single location and thus serve as a microcosm for the broader TCC program.

The extended contract period for TCC evaluation will allow the LCI evaluation team to wrap up the full suite of qualitative data collection tasks that were proposed in the original Round 1 evaluation plan. However, the LCI evaluation team will be unable to publish findings during the current evaluation period that reflect those qualitative data. The LCI evaluation team is seeking other grant opportunities to synthesize and publish findings from qualitative data collection activities, and at a minimum will anonymize all of the qualitative data collected and share the anonymized data with SGC for posterity.

Communicating the Effects of TCC

To broaden public understanding of what TCC accomplished, the LCI evaluation team produced five annual progress reports for Round 1 sites that document the tangible results of their TCC-funded initiatives through June of 2023. To complement the tangible outputs details within the annual progress reports, each report also spotlights

the perspectives of TCC project partners and beneficiaries. These perspectives are chronicled in the “Stories from the Community” chapter (see **page 30**).

It’s important to note that the individuals profiled in the “Stories from the Community” chapter are recruited directly by TCC project partners and then interviewed by the LCI evaluation team. While providing invaluable insights into what the TCC model looks like in practice, these interviews are not included in the formal evaluation plan for Round 1 TCC grants (and thus are discussed separately from other qualitative data collection activities) because the interviewees are not recruited through a systematic or randomized recruitment strategy, which are conventions in traditional program evaluation. However, given TCC’s emphasis on community empowerment, the LCI evaluation team felt it was critical to give TCC project partners the opportunity to amplify the voices they felt helped tell the story of their work, and not just rely on traditional program evaluation methods for doing so.

This report marks the final progress report that the LCI evaluation team was funded to deliver within its contract period. In the next year, however, the LCI evaluation team will continue to add to its standalone compendium of “Stories from the Community” hosted on the LCI website.⁸ The LCI evaluation team has committed to publishing a total of 10 “stories” for each TCC Round 1 site. It’s important to note that this total is a goal that is subject to change, as it is dependent on respondent participation.

Data Collection Activities in Watts Through June 2023

With respect to output indicators, the LCI evaluation team successfully collected data from Watts Rising partners through the end of June 2023 (which are highlighted as implementation accomplishments throughout this report). While Watts Rising partners received an extension to continue grant implementation through the end of September 2025, it is outside of the LCI evaluation team’s scope of work to continue to collect output data from project partners beyond June 2023.

With respect to outcome- and impact-related quantitative indicators, the LCI evaluation team completed baseline data collection by the end of 2019. Findings from baseline data collection are narratively described in the final chapter of Watts Rising’s first annual report, titled *Watts Rising: A Baseline and Progress Report on Early Implementation of the TCC Grant*. For more recent data on many of the quantitative indicators that were featured in the baseline report, see **Appendix 8, page 94** of this report.

⁷ See Section 3.3 of the TCC Round 1 Evaluation Plan for more information about how each of these data collection instruments will be used: http://sgc.ca.gov/programs/tcc/docs/20190213-TCC_Evaluation_Plan_November_2018.pdf (since the publication of the Round 1 evaluation plan, the LCI evaluation team committed to interviewing members of each

⁸ Found here: <https://innovation.luskin.ucla.edu/transformative-climate-communities-stories-from-the-community/>

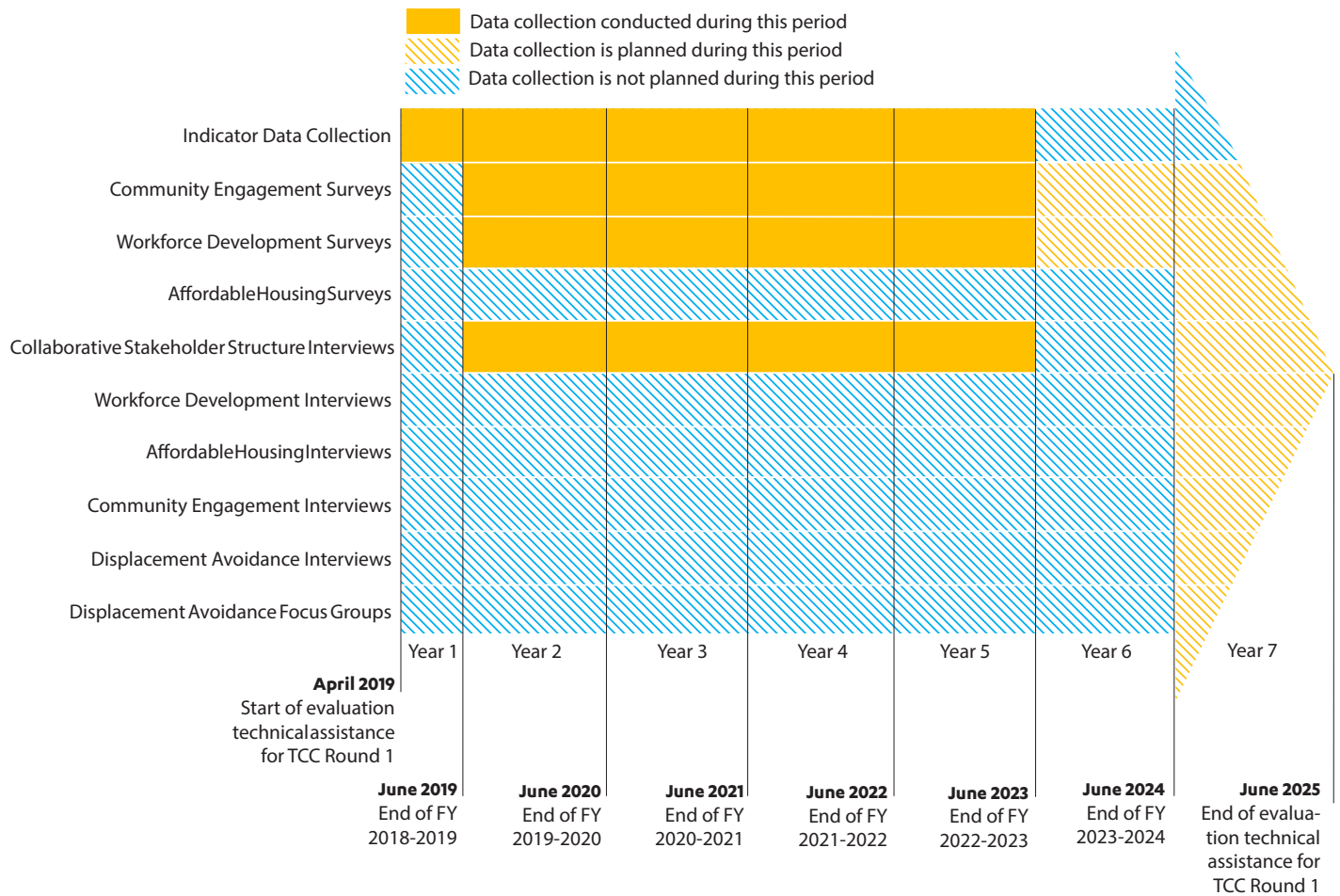
In regard to qualitative data collection, the LCI evaluation team has disseminated two surveys in all three Round 1 sites: (1) one focused on outcomes from community engagement activities and (2) one focused on outcomes from workforce development activities. The LCI evaluation team substantially revised the survey instruments from the versions included in the 2018 evaluation plan, improving their legibility and reducing their completion time. The surveys have been made available in both English and Spanish, and in print and online formats.

In Watts, community engagement surveys were disseminated at a community engagement event in 2020, before the COVID-19 pandemic. Workforce development surveys were disseminated at the beginning and end of the following job training programs: (a) GRID Alternatives’ solar installation training program; (b) MegaWatts EV Fleet Administration.

In addition to surveys, the LCI evaluation team has conducted interviews with individuals involved with and/or benefiting from grant implementation. Specifically, the LCI evaluation team has conducted interviews with members of the Collaborative Stakeholder Structure to learn more about the process of TCC implementation, including strengths, challenges, and opportunities for improvement. Additionally, during the most recent fiscal year, the LCI evaluation team began the process of interviewing individuals who had participated in the aforementioned job training programs to learn more about their post-training employment outcomes. For these latter interviews, the LCI evaluation team prioritized individuals who had been out of their job training program for at least a year.

Figure 2 provides a summary timeline of data collection activities for evaluating Watts Rising. Pending activities are dependent upon respondent participation.

Figure 2. Timeline of Data Collection Activities in Watts by Fiscal Year (FY)





Historical Watts Neighborhood. Photo credit: Watts Neighborhood Council

A Brief History of Watts: The Legacy of Environmental Injustice

TCC Awards are reserved for California’s most disadvantaged communities. Understanding how those communities became so disadvantaged is critical for evaluating the efficacy of TCC. If the root causes of pollution, poverty, and other harms are overlooked, then they are likely to continue. This section provides a brief history of Watts and how environmental injustices from the past affect the lives of Watts residents today.

The Watts neighborhood covers about two square miles of land situated in South Los Angeles, just north of the 105 freeway, and flanked by the Green Meadows, Florence-Firestone, South Gate, and Lynwood neighborhoods.⁹ The area now known as Watts was once the *Tajáuta* village of the *Kumivít*, or the *Gabrielino/Tongva* tribe. *Tongva* communities lived in the region for at least 7,000 years before Spanish settlers arrived in 1769.¹⁰ For native people, land dispossession caused displacement, loss of livelihood, forced labor under California farmers, and mass incarceration on vagrancy charges.¹¹ In 1843, the area known as Watts became part of *Rancho La Tajáuta* Mexican Land grant and was subsequently sold and developed pri-

marily for agriculture and grazing. Although predominantly white, Watts also attracted Mexican and Mexican American railroad workers, or *traqueros*, building the Southern Pacific rail line.¹² Between 1907 and 1926, Watts was incorporated as its own city before consolidating with the City of Los Angeles, enabling residents to raise taxes to develop electric, water, transportation, schools, and other infrastructure.^{13, 14}

In the first half of the 20th century, Watts experienced a demographic shift, and subsequent redlining. Many African Americans moved from the American South to the region in the Great Migration; racially restrictive covenants in other neighborhoods concentrated these migrants in South Los Angeles to flee racial terror and economic disenfranchisement. By 1940, Watts was a predominantly working-class African American community.¹⁵ In 1939, the Home Owner’s Loan Corporation published redlining maps assigning grades marking areas hazardous for investment. Race restrictive covenants and redlining have caused disinvestment in black, indigenous, and other people of color communities, which have had persisting effects on the built environment and racialized health and wealth inequities.¹⁶

⁹ South L.A. (n.d.). L.A. Times. Retrieved May 3, 2022, from <http://maps.latimes.com/neighborhoods/region/south-la/>

¹⁰ Hernández, K. L. (2017). *City of Inmates*. UNC Press.

¹¹ *Ibid.*

¹² Vallejo, J. A. (2016, July 7). How Watts Provided the Foundation for a Family’s Rise in America | Essay. Zócalo Public Square. <https://www.zocalopublicsquare.org/2016/07/07/watts-provided-foundation-familys-rise-america/ideas/nexus/>

¹³ Ray, M. B. (1985). *The city of Watts, California, 1907 to 1926*. Los Angeles, Calif. : Rising Pub. <http://archive.org/details/cityofwattscalif0000raym>

¹⁴ TIMES, S. C. O. T. (1910, September 11). WHAT PUBLICITY DID FOR WATTS. *Los Angeles Times* (1886-1922), V19.

¹⁵ Sonksen, M. (2017, September 14). *The History of South Central Los Angeles and Its Struggle with Gentrification*. KCET. <https://www.kcet.org/shows/city-rising/the-history-of-south-central-los-angeles-and-its-struggle-with-gentrification>

¹⁶ Nardone, A., Chiang, J., & Corburn, J. (2020). Historic Redlining and Urban Health Today in U.S. Cities. *Environmental Justice*, 13(4), 109–119. <https://doi.org/10.1089/env.2020.0011>



Young men near Simon Rodia’s Watts Towers, 1966. Photo credit: Bill Ray/Life Pictures/Shutterstock

The legacy of policing in South LA has also had an impact on the built environment and shaped community activism. Watts is commonly known for the 1965 Watts Uprising, which was sparked by a traffic stop that escalated into what felt like another instance of police brutality against Black men. The moment made Watts a hotbed for the Civil Rights, Black Power, and Black Arts Movements. Groups like the Studio Watts Workshop, Watts Writers Workshop, Watts Towers Arts Center, Pan Afrikan People’s Arkestra, and Black Panthers were active in Watts through the mid-70’s.¹⁷ The 1980s saw a continued rise in mass incarceration of the black and brown people in this area with War on Drugs policies.

Climate change poses a great risk in exacerbating social and environmental injustices for Watts’ residents. Today, about 70% of Watts residents are Hispanic/Latino, and 28% are African American or Black. Intergenerational poverty and unemployment persist; median household income is \$25,161 in Watts.¹⁸ Housing costs, displacement by gen-

trification, and homelessness in the area remain major concerns. Seventy percent of Watts residents are renters, indicating a major risk of displacement.¹⁹ Those experiencing housing burden and poverty face large barriers in effectively adapting to climate change.

Watts residents face a host of adverse environmental conditions impacting health. They experience severe exposure to pollutants due to the historic siting of noxious land uses (i.e., metal smelters, light industrial factors) near schools and residential areas. Most areas score above the 95th percentile in CalEnviroScreen 4.0.²⁰ Watts has temperatures 4.7 degrees Fahrenheit more than the Los Angeles average, and in 15 years it is projected to experience 44 extreme heat days per year.^{21,22} In terms of transportation infrastructure, Watts residents experience a disproportionately high percentage of pedestrian crashes.²³ In sum, these environmental injustices amount to a life expectancy of 77.7 years, about 10 fewer compared to other parts of Los Angeles County.²⁴

¹⁷ Sonksen, M. (2017, September 14). The History of South Central Los Angeles and Its Struggle with Gentrification. KCET.

<https://www.kcet.org/shows/city-rising/the-history-of-south-central-los-angeles-and-its-struggle-with-gentrification>

¹⁸ Watts Rising—About Watts Rising. (n.d.). Retrieved March 16, 2022, from <https://www.wattsrising.org/home/about-watts-rising>

¹⁹ Hansack, A. (2015). URBAN RENEWAL OR URBAN REMOVAL? AN EXAMINATION OF THE REDEVELOPMENT EFFORTS FOR THE JORDAN DOWNS HOUSING PROJECTS IN LOS ANGELES, CALIFORNIA. 77. <https://wattsnc.org/wp-content/uploads/2018/06/FINALDRAFTThesis.pdf>

²⁰ CalEnviroScreen 4.0. OEHA. <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

²¹ UCLA researchers aim to pinpoint sources of heat injustice. (2021, October 15). UCLA Luskin Center for Innovation.

<https://innovation.luskin.ucla.edu/2021/10/15/turner-and-colleagues-receive-grant-to-pinpoint-sources-of-heat-injustice/>

²² California Healthy Places Index: Extreme Heat Edition. (n.d.). Retrieved May 3, 2022, from <https://heat.healthylplacesindex.org/>

²³ Hayes, R. (2019, December 10). Map shows where cars hit pedestrians most often in Los Angeles. ABC7 Los Angeles.

<https://abc7.com/pedestrian-deaths-los-angeles-killed-map-of-pedestrians-crashes-la-fatalities/5745327/>

²⁴ Highway to Health. (n.d.). Measure of America. Retrieved May 3, 2022, from

https://measureofamerica.carto.com/viz/33128a2f-6252-438c-9407-65b37d4f7419/embed_map



Participants of Urban Peace Institute’s Leadership Institute protesting against gun violence. Photo credit: Urban Peace Institute

Watts Rising: Looking Back and Forward

Watts Rising builds on years of community efforts to address challenges by soliciting resident input through meetings and other community engagement processes. Examples of previous work include the 1995 Watts Corridors Redevelopment Plan, the 2008 Central Avenue Master Plan, and, more recently, Watts Green Streets, Watts Re:Imagined, Wilmington Avenue Great Streets, MudTown Farms, and other projects. The Watts Labor Community Action Committee, Watts Century Latino Organization, and Grant Housing and Economic Development Corporation were part of the Community Advisory Committee for

the Watts Corridors Redevelopment Plan, and all became a part of Watts Rising. Over the past 15 years, Watts community engagement efforts have included the use of a diverse set of communications materials including flyers, door-to-door canvassing, emails, social media posting, and more in both English and Spanish. Efforts are made to ensure community meetings, workshops, and forums are bilingual and accessible. These methods were also used in community engagement around the Watts Rising application.

In 2013, Charles R. Drew University of Medicine and Science (CDU) led the Watts Community Studio, trained and hired youth to administer a survey to 700 households in Watts. The result of these efforts, in part, was the identification of community priorities. These later helped to inform project

design and selection for Watts Rising. CDU will conduct a survey during the grant period to track the evolution of resident perceptions throughout project implementation.

After the launch of TCC and call for proposals in 2016, HACLA hosted three workshops with over 100 attendees to support development of their application. Through this process, Watts residents had the opportunity to identify their priority projects for investing TCC dollars. HACLA also hosted additional working groups in 2017 focused on developing specific aspects of the transformative plans.

The result of these engagement efforts is Watts Rising, a suite of projects and plans aimed at reducing GHG while also providing local environmental, health, and economic co-benefits for Watts residents. Per the TCC guidelines for Round 1 applicants, Watts Rising includes the following elements: (1) TCC-funded projects that have a direct impact on GHG reductions; (2) leveraged projects that further the broad goals of TCC and only use matching funds; and (3) transformative plans to ensure that the suite of projects are bolstered by meaningful community engagement, workforce development, and displacement avoidance activities.

In early 2018, Watts Rising was selected by SGC for a TCC

grant of \$33.3 million. Watts Rising also leveraged \$169 million in outside funds toward this vision. The TCC award not only brings a significant influx of financial resources to the community, but also reinforces the cross-sector partnerships that were built before and during the TCC application process. **Table 2** provides a summary of the Watts Rising projects, plans, and partners involved with implementation. **Appendix 1, page 84**, provides a detailed map of where all of the TCC and leveraged projects are located within the 2.6 square miles of the TCC Watts Rising boundary area.

The following section chronicles the perspectives of TCC project partners and beneficiaries over the course of the grant implementation period. Later in the report, we include summary profiles on the various transformative plans, TCC-funded projects, and leveraged projects that make up Watts Rising. Each profile includes an overview of the project or plan’s goals, the roles of various partners involved with implementation, and key accomplishments that have occurred following the announcement of Watts’ TCC award through the end of FY 2022-2023. This period overlaps with about 14 months of post-award consultation and approximately 52 months of program implementation.

Table 2: Summary of Watts Rising Projects and Plans

Project/Plan Type	Project/Plan Name	Partners	TCC Funding	Leveraged Funding
Community Engagement Plan	N/A	Housing Authority of the City of Los Angeles*	\$1,758,252	\$565,200
Displacement Avoidance Plan	N/A	Housing Authority of the City of Los Angeles;* Mayor’s Office of Economic Opportunity; Watts Century Latino Organization	\$0	\$190,000
Workforce Development Plan	N/A	GRID Alternatives Greater LA*	\$327,386	\$5,300
Affordable Housing and Sustainable Communities	Jordan Downs Phase 2A	Housing Authority of Los Angeles;* Michaels Development Company	\$13,250,000	\$26,446,312
Food Waste Prevention and Rescue Program	MudTown Farms	Watts Labor Community Action Committee*	\$392,110	\$4,579,393
Low Carbon Transit Operations Program	DASH Bus Electrification	Los Angeles Department of Transportation*	\$1,700,000	\$6,893,075
Low-Carbon Transportation	Mega Watts Electric Vehicle Car Share	Watts Labor and Community Action Committee;* Green Commuter	\$1,833,862	\$615,881
Rooftop Solar and Energy Efficiency Projects	Solar Watts	GRID Alternatives Greater LA*	\$1,315,152	\$0
	Energy Efficiency	Habitat for Humanity*	\$1,802,955	\$0

Project/Plan Type	Project/Plan Name	Partners	TCC Funding	Leveraged Funding
Urban Community Forestry Projects	Watts Community Tech Garden	Los Angeles Cleantech Incubator*	\$364,000	\$0
	Watts Yardners	Watts Labor Community Action Committee*	\$523,549	\$50,000
	Greening Public Housing	North East Trees*	\$275,475	\$64,500
	Greening Watts	North East Trees;* TreePeople*	\$1,055,918	\$91,575
Urban Greening	WalkBike Watts	Los Angeles Department of Transportation;* Department of Cultural Affairs;* Urban Peace Institute; We Care Outreach	\$3,511,260	\$1,013,110
	Wilmington Avenue Great Streets	City of Los Angeles Bureau of Street Services*	\$868,000	\$0
	Weigand Elementary Urban Trees / Rain Garden	TreePeople*	\$124,439	\$10,038
	Watts Cool Schools - Green Schools	Los Angeles Unified School District;* TreePeople*	\$621,861	\$13,755
	Greening the A Line	TreePeople*	\$305,179	\$0
	Century Gateway Park	The Michaels Organization*	\$428,575	\$260,683
	Freedom Tree Park	Housing Authority of the City of Los Angeles*	\$1,157,900	\$0
Leveraged Projects	103rd Street Streetscape	City of Los Angeles Bureau of Street Services*	\$0	\$836,700
	103rd Street Urban Trees/ Rain Garden	TreePeople	\$0	\$104,166
	Central Avenue Streetscape	City of Los Angeles Bureau of Street Services; Grant Housing and Economic Development Corporation	\$0	\$4,127,890
	Century Boulevard Complete Streets	City of Los Angeles Bureau of Street Services*	\$0	\$10,689,780
	Jordan Downs Phase 1B	Michaels Development Corporation*	\$0	\$67,682,777
	Jordan Downs Retail Center	Primestor	\$0	\$44,314,118
Total**			\$33,250,000	\$127,755,431

*Project lead

**TCC funding subtotal here does not include additional grant money provided for grant administration and other related activities. Funding amounts are correct as of June 2019. Grant agreements may have been amended since.

Note: Changes to this table since the Year 1 Annual Report include: 1) Leveraged Project Success Avenue Green Streets lost funding and will not proceed with implementation. The Total Leverage funding amount has been adjusted to reflect this; 2) Community Healing Gardens is no longer a partner on the Community Tech Garden project; 3) GRID Alternatives replaced Restore Neighborhoods LA on the Solar Watts and Workforce Development Plan; and 4) Habitat for Humanity replaced Restore Neighborhoods LA on the Energy Efficiency project. 5) From Lot to Spot closed its office doors due to the COVID-19 pandemic. An RFP process was commenced to identify a replacement project implementation partner resulting in the selection of TreePeople to lead the project.



Students planting trees at 112th Elementary school. Photo credit: TreePeople

AS A COMMUNITY-LED INITIATIVE, Watts Rising engages a wide variety of stakeholders. Residents, local business owners, workers, and others help implement projects to advance community-defined goals for climate action, economic development, and more. This chapter provides a series of case studies of how these stakeholders have contributed to the roll out of Watts Rising and/or benefited from the initiative's suite of projects and plans. The case studies are presented in reverse chronological order to spotlight more recent additions to this annual report. It's important to note that these stakeholders represent only a small sample of the many individuals who have shaped — or been shaped by — the implementation of Watts Rising. Thus, their purpose is to be illustrative, but not exhaustive, of the ways in which Watts Rising has touched the lives of community stakeholders.

Veteran activist leads displacement avoidance, helping residents stay in Watts



BACKGROUND

This case study highlights how the Watts Rising Displacement Avoidance Plan (DAP) connects community leaders like Arturo Ybarra with Watts residents, like Marlene Cisneros, to protect local homeownership enabling and empowering community members to stay in Watts and thrive. To learn more about the DAP, see [page 49](#).

Interviews for this story were conducted in April and October of 2023.

Arturo Ybarra, founder and executive director of Watts Century Latino Organization at a housing clinic workshop on 3/12/2022. Photo credit: Los Angeles Mayor's Office of Economic Opportunity

ARTURO YBARRA began his career as an activist and organizer as a teen in Mexico. In 1968, he survived the Tlatelolco massacre in Mexico City and was arrested and tortured for his participation in the Mexican Student Movement. In 1969, after he was arrested again, Ybarra's sister invited him to stay with her in Moorpark, so he made the journey to Southern California. He soon jumped into union and tenant organizing in South Los Angeles.

Years later, Ybarra and his wife, Albeza, moved to Watts and in 1990, founded the Watts/Century Latino Organization (W/CLO). "We created this organization with the vision of creating bridges of communication and unity between Latinos and African Americans," Ybarra said. The W/CLO has operated for over 30 years, providing services, such as homeownership workshops, as well as celebrating cultural events, like the organization's flagship annual Multicultural Cinco de Mayo Festival. Ybarra's organization embodies a spirit of multiculturalism: "My grandfather was a descendant from African slaves. My grandmother was a descendant from Europeans... My blood is multicultural."

The W/CLO was a natural partner to help guide and implement the Watts Rising DAP — a core requirement of the TCC

grant. Decades before TCC was created, Ybarra and the W/CLO provided essential anti-displacement services to the Watts community. Ybarra described how, through workshops, educational programs, and mentorship, his organization has helped many Watts residents save their homes from foreclosure. His daughter, Pahola, served as Program Manager and was instrumental in these efforts as well.

"[We invite] Latinos and African Americans and the poor population [to learn] what they need in order to qualify to buy their first house [and] manage their debts."

ARTURO YBARRA

Motivated by TCC grant requirements and led by W/CLO and Mayor Karen Bass's office, the DAP provides formal avenues to connect community-based organizations with local government leaders within the City of LA and beyond. For example, Ybarra described a burgeoning relationship his organization is building with LA County Supervisor Holly Mitchell. He hopes that it will "make it easier for the government agencies and elected officials... to assist this region that has been without voice nor representation for decades."

W/CLO and Ybarra's leadership became ever more critical to the community when pandemic-era eviction moratoria were lifted, creating an influx of people threatened by displacement. "The local Latino population [is not] much aware of how the system works... And on the part of the elected officials, they don't know how to work with the Latino community... there's a lack of a real campaign to involve people that might be expelled." The Watts Rising DAP is designed to help address this cultural and informational disconnect between decision makers and the community.

"We helped hundreds of homeowners to save their house... For those people that wanted to somehow thank us for the work we have done, they brought us some food from El Pollo Loco, and lunches like that, that was our way of being paid, it was beautiful."

ARTURO YBARRA

Arturo Ybarra — renowned for his leadership, activism, and dedication to uniting the people of Watts and South LA to support their community — passed away in July 2023. His tremendous impact on his community, the role he played as an activist and leader, and his legacy of unity and multicultural connection is recognized by many, as documented by Andrew Campa's article in the Los Angeles Times, entitled "Watts' Arturo Ybarra, the 'epitome of what a community activist should be,' dies." The Ybarra's daughter, Autumn, has recently stepped in to join her mother Albeza to lead the organization.

MARLENE CISNEROS lives with her husband and children in Watts, which she has called home for over 15 years. After starting out by renting a home, she was able to purchase her house in 2009 after the housing market crashed, lowering prices. When she was inquiring about lowering her interest rates, Cisneros immediately turned to Arturo Ybarra and the W/CLO.

"Mr. Ybarra at the W/CLO helped me step by step on how to handle this. He did that for everyone that came to him. He helped everyone individually and without hesitation. He was able to even help me lower my interest rate from 5% to 3%. With the money I have saved, I am able to spend that money on my daughter's education [at a private school]. I am immensely grateful for his help. There is no one else like him in this community. He was like a therapist and attentive to everyone."

Cisneros learned of the W/CLO from Amada Valle, a member of Watts Rising's Community Advisory Group, residents who contribute to Watts Rising's governance and advise leadership on projects and plans. Valle approached Cisneros during an event in a local park and encouraged her to attend her first W/CLO workshop over a decade ago. Since then, Cisneros has participated in countless W/CLO events, including the organization's annual backpack giveaway and food distribution event. Most recently, she attended a workshop hosted by W/CLO and Mayor Bass's Office to help her and other residents understand how to lower their utility bills.

Cisneros often shares her appreciation of these events with her friends and family. "I ran into a friend the other day and told her the unfortunate news of Mr. Ybarra's passing. She said she stopped by W/CLO a few weeks prior and they helped her purchase her first home. It speaks to the great work Mr. Ybarra did, even in his last few months." Ybarra and W/CLO have had a tremendous impact on Cisneros's life, not only enabling her to keep her home, but also helping her to stay in her community of Watts.

"This neighborhood is where I feel most comfortable. I was thinking of moving, but Mr. Ybarra told me not to because the city and others were fixing up the streets, and more businesses and amenities would be coming. I trust him so much that I listened to that advice."

MARLENE CISNEROS



Marlene Cisneros, a Watts resident and W/CLO participant.

Photo credit: UCLA Luskin Center for Innovation

Business-oriented workshops and mentorship support social entrepreneurship in Watts



BACKGROUND

This case study highlights how the Watts Rising Displacement Avoidance Plan (DAP) helps entrepreneurs connect with local government officials. The goal is to advance small business development and enable local organizations and businesses to grow and flourish. The story highlights the stories of Shaqueal Adkins and Ladale Hayes, each of whom has benefited from the mentorship of Ivory Parnell-Chambeshi, the City of LA official who oversees Watts Rising implementation. For more about the DAP, see [page 49](#).

Interviews for this story were conducted in March and August of 2023.

Shaqueal Adkins, owner of Our Watts Bookshop and small business workshop participant. Photo credit: Shaqueal Adkins

SHAQUEAL ADKINS has been in Watts since she was eight years old. Now, living with her two small children, she commutes to a full-time job at a law firm in Culver City. But her dream is that she and her neighbors won't have to commute far outside of Watts — they'll be able to live and work in their own community. For now, though, the lack of local businesses makes that tough: "In terms of business, and growth and development, we are lacking in that area. It's challenging to increase foot traffic in our forgotten community," she said.

To address this dilemma in 2020, Adkins opened her own small business: [Our Watts Bookshop](#), an independent new and used bookstore. "There was a lack of small businesses in our community," she said. "As an avid reader and supporter of bookshops owned by Latina and Black women in Inglewood, Pasadena, and Altadena, it felt like Watts was left out. I always wanted to open a bookstore, so why not do it at home?"

Adkins faced challenges getting her business running, including finding a brick-and-mortar location where she could afford rent. She started a GoFundMe campaign to raise money to open and maintain a physical location. Given the precariousness of her business endeavor, a post on the Watts Rising Instagram account about the

DAP small business workshops piqued her interest. She soon attended a virtual workshop about the financial side of starting a small business, from opening a checking account, to how business loans work.

Adkins has received support and mentorship from Ivory Parnell-Chambeshi, the Director of Neighborhood Initiatives for Watts Rising within the office of LA Mayor Karen Bass. Parnell-Chambeshi, a key driver and strategist in implementing the Watts Rising DAP, has connected Adkins with different organizations and individuals that could support her business development.

For instance, she suggested that Adkins apply for the LA Cleantech Incubator (LACI) Founders' Business Accelerator, a program that supports underrepresented small business owners as they get started. She was accepted, and the program provides her with paid training on how to

"[Watts Rising] has lifted me up in a way that I didn't think was possible. Because of their interactions, influence, and collaboration with organizations across LA, I have all these people that are like, 'Miss Shaqueal, how can we help you today?'"

SHAQUEAL ADKINS

run and maintain her business. “Ms. Ivory and Watts Rising would reach out to me like, ‘I think you should partner with this organization to further your plans,’ ‘I think you should reach out and apply for LACI.’ They were on top of it. They were very much involved in lifting me to the next step.”

Adkins sees her bookstore becoming a hub for the community to come together. “Outside of religious organizations,

we don’t have a place where you can go and sit down, have a cup of coffee, read a book, buy a book, engage in fellowship. I feel like Our Watts Bookshop is going to bring that back home. I’m making it a mission. When I open a physical location, we’re hiring people within the community. When we open up, I want home girl from up the street to come walk to her job and get like 20 some dollars an hour. You can work in your community and make a livable wage.”

LADALE HAYES has been connected with Watts for decades: he lived in the community as a child, then later worked as a crew supervisor for North East Trees on urban forestry in Watts (see page __). Now, Hayes is in the process of starting a nonprofit designed to promote careers in wildland firefighting and urban forestry for Watts residents. Like Adkins, he is getting support in the process from Ivory Parnell-Chambeshi. “Ms. Ivory is a champion,” he said. “She has really helped me out. I love picking her brain. I probably wouldn’t be where I am right now if it wasn’t for her.”

Hayes first began his career in forestry as an incarcerated wildland firefighter. In 2007, after several years of imprisonment, he was transferred to a so-called “fire camp,” where incarcerated individuals are trained to fight wildfires. It was then that Hayes became inspired to start his nonprofit, [Operation Flame](#), and he started planning while still incarcerated. “I didn’t want to wait till I was eligible to be released to start putting my life together, so I worked on things mentally before I left,” he explained.

Hayes saw potential for his new organization to support career development for young people in his community, while also opening a door for more Latino and Black individuals to join the U.S. Forest Service. “I wanted to be of assistance to the younger generation and help provide job creation in a field where we’re lacking Black and Brown employees in the Forest Service,” he said. “There’s not too much recruiting for any wildland firefighter positions in the City of Los Angeles. So how can we get involved? It takes some of us who’ve actually been there to help others get involved.”

After his release, Hayes spent three years working with North East Trees while simultaneously advancing the goals of Operation Flame. It was through this connection to Watts Rising and North East Trees that Hayes met Parnell-Chambeshi and gained access to her mentorship and other resources associ-



Ladale Hayes, founder of Operation Flame, planting new tree cover in Watts. Photo credit: Harvard School of Public Health

ated with the DAP. Through this network, Hayes obtained an opportunity for Operation Flame to provide wildland firefighting workforce training through the City of Los Angeles.

“Without funding, we really can’t do too much. The city and North East Trees did take a chance with us — they believed in us. I hope with the seed funding from the City of LA, other funders can also get involved.”

LADALE HAYES

Now, the organization is nearly ready to start with its first three cohorts of trainees. During the two-month program, participants will develop knowledge and skills essential to firefighting and forestry careers, earning seven different certifications, plus a stipend of approximately \$4,000. “We have all the basics covered — way more beyond the requirements to be hired as a wildland firefighter for the Forest Service or other wildland firefighting agencies,” he said.

Street Team ambassadors build community, capacity and confidence



BACKGROUND

This case study illustrates how the TCC-funded Street Team program, which employs Watts residents as community outreach ambassadors, fosters local leadership and capacity. Through the eyes of two Street Team members, their stories show how training and work experience help residents gain career-building skills and confidence. To learn more about the Street Team and Watts Rising's community engagement plan, see [page 47](#).

Interviews for this story were conducted in January and February of 2023.

Watts Rising Street Team members Anai Velazquez (left) and Mary Ann Cortez (right) table at an event for Watts Rising.

Photo credit: Housing Authority of the City of Los Angeles (HACLA).

MARY ANN CORTEZ has been involved in Watts Rising since she joined initial stakeholder meetings to apply for the TCC grant. Since moving to Watts in 1994, Cortez has raised six children — all of whom have attended Watts public schools — and built a career leading parent engagement efforts and events with the Los Angeles Unified School District (LAUSD). While she was initially skeptical about Watts Rising projects getting done, her investment in creating positive change in her community kept her coming back to the meetings.

“I was always there during the first planning stages. And now I’m seeing it all come together. Like, I was one of the first to drive the electric vehicles.”

MARY ANN CORTEZ



Mary Ann Cortez presents at the Watts Rising public forum.

Photo credit: Luskin Center for Innovation.

Cortez’s role in local schools has been key to her success as a Street Team member. She canvasses parents waiting to pick up their children, easily engaging them to spread the word about Watts Rising programs. And her job with LAUSD perfectly positions her to plan Cool Schools tree planting events as part of Watts Rising’s Urban Greening initiative.

Cortez’s work has benefited countless members of her community. She regularly drives families to MudTown Farms to pick up free produce and has helped residents save hundreds of dollars through the free solar program. And the students who help plant trees for the Cool Schools program not only learn about trees but also create a legacy of shadier, more heat-protected playgrounds for future students.

“I envision each child growing up and telling their own child, ‘I planted that tree.’ They’ll always have memories of what they did in their community.”

MARY ANN CORTEZ

Beyond the benefits to her fellow Watts residents, Cortez has gained invaluable skills and experience, becoming a stronger leader and communicator. She has become more comfortable with connecting with people over Zoom and WhatsApp, and managing events — sometimes two in one day — and these experiences have strengthened her organization and

multitasking abilities. Street Team members also regularly present at Watts Rising public forums, an opportunity that Cortez credits with helping her to develop her skills as a public speaker. “I present on what I did each month, answer questions and take feedback. These are important skills that I’ve developed as a Street Team member.” And to add to the skills and capacity she has built, Cortez has greatly increased her income through working on the Street Team and other Watts Rising projects. Cortez is

determined to see her Watts Rising projects through. After the success of the first tree planting event for the Cool Schools project, there are three more schools to go — and then the trees will need to be watered and maintained.

“It’s a blessing, being a part of the Street Team. I get to work in my community, deal with projects, and I also get paid. I’m just excited to be a part of it.”

MARY ANN CORTEZ

ANAI VELAZQUEZ and her two siblings grew up in the same Watts home where she and her parents still live. Velazquez has been an integral part of her church community throughout her life, including attending St. Lawrence, a private school in the Watts Rising project area. After years of seeing her peers participate in the local public school community, Velazquez saw the Watts Rising’s Street Team as a way not only to deepen her participation in the church but also to expand her involvement in other aspects of the local community.

“I’ve become less afraid to talk with people outside my own circle. I’ve found that if I’m kind, they’ll be kind back. Being a Street Team member made me way more comfortable with talking to people.”

ANAI VELAZQUEZ

Velazquez was nervous to start the Street Team outreach work — she was shy, and talking to other local residents wasn’t initially a comfortable task. But as she continues her second year as a Street Team member, she notices that she has become much more comfortable with the work. She and other team members table around the neighborhood and at local events, helping their neighbors to learn about the different programs and opportunities Watts Rising offers.

Through her work, Velazquez has helped many different members of her community. By sharing information and connecting community members to Watts Rising programs, she ensured that the priests at her church could replace a leaking refrigerator, helped the deacon get free rooftop solar panels, and connected a grieving widower with gardening support through MudTown Farms. Armed with information that helps fellow Watts residents, she has become more confident and connected in the community.

In addition to becoming more confident and skilled at community outreach and networking, Velazquez has



Anai Velazquez at Corazon de Watts event. Photo credit: HACLA

“I like leading and organizing people and events. It was my idea to table at St. Lawrence’s carnival — we got a lot of leads in those three days.”

ANAI VELAZQUEZ

benefited from the Street Team program financially. She has earned enough to pay off her car loan five months early, with enough left over to fund family celebrations for her birthday and other occasions.

Now, looking forward, Velazquez is ready to take the confidence and skills she has gained with the Street Team into a new role: teaching a class at the career technical education program where she works as a receptionist for her day job. Once she receives the required credentials, she hopes to teach an entrepreneurship course, building on her experience running a home decorating business on the side.

“After a year as a Street Team member, I feel more confident to take on responsibility and connect people from different organizations. I feel like I can handle tasks when people ask if I can do it.”

ANAI VELAZQUEZ

Planting trees and the seeds of green careers in Watts



BACKGROUND

This case study highlights how TCC investments in urban greening have empowered young Watts residents with technical skills, community engagement experience, and career inspiration. It showcases the stories of Eddie Guerrero and Maria Flores, two recent recruits for the Watts crew of North East Trees, the organization coordinating two urban forestry projects in Watts (Greening Public Housing and Greening Watts). To learn more about urban forestry projects in Watts, see [page 64](#).

Interviews for this case study were conducted in September 2022.

Eddie Guerrero and other North East Trees staff take part in a tree planting event at Gonzaque Village, a public housing community in Watts. Photo credit: UCLA Luskin Center for Innovation

EDDIE GUERRERO has lived in Watts throughout his 24 years. Growing up in a neighborhood without much green space, he spent little time in nature. But his grandma had a green thumb, and Guerrero absorbed her love of plants and trees as she helped to raise him.

Accustomed to sunny streets with little shade, Guerrero didn't think much of the lack of trees lining the streets of Watts before he joined North East Trees. "We lack natural environment here. We're surrounded by factories. So, we're planting trees, which is really important — but a lot of people just don't know how important it is. I think Watts Rising can raise awareness in a really positive way."

Working with North East Trees has given Guerrero a more nuanced perspective on how planting trees benefits communities like Watts. Learning about the biology of different types of trees — and the implications for how they should be planted — has inspired his career aspirations.

"In five to 10 years, I see myself working for CalFire," he said, referring to California's Department of Forestry and Fire Protection. "Everything I'm doing right now, when it comes to restoration, they do in wildland firefighting. Certain trees are more fire resistant than others. So everything I know about



Eddie Guerrero stands by a tree North East Trees planted in Watts. Photo credit: UCLA Luskin Center for Innovation

"It makes me really happy, being able to be part of this change in my community. I enjoy seeing the people sitting and enjoying the shade of the trees we planted."

EDDIE GUERRERO

the biology is very important when it comes to fire."

As a lifelong Watts resident, Guerrero was an ideal candidate for youth work opportunities at North East Trees because the organization seeks to hire people who live in the neighborhoods where they are planting trees.

Residents hired into these positions conduct community engagement to educate fellow residents about the benefits of planting new trees. For instance, before planting trees at the local community of Gonzaque Village, the young workers asked residents to pledge to help care for trees and provided information on how to do so.

After witnessing the effects of poor tree-planting practices in decades past, some residents worry about the damage large trees can cause, such as broken pipes and cracked sidewalks. Guerrero and his colleagues work to help residents understand that by planting the right trees in the right places, North East Trees can provide more shade and other benefits to the Watts community without causing damage.

MARIA FLORES has lived in Watts for over a decade. Although she had little exposure to nature throughout her childhood, she took initiative to explore the environment more as she got older, and she knew that she wanted to get involved in environmental work in her community. A temporary job at North East Trees — which soon became permanent — gave Flores the chance she had been searching for to engage her community while bringing more nature to Watts.

“Working with North East Trees has given me a lot of insight. It has opened my eyes to the importance of bringing nature into urban spaces, because especially in our area, we’re so industrialized.”

MARIA FLORES

Flores is doing more than planting trees. She is gaining technical skills and knowledge about tree identification and ecosystem restoration that she hopes will help lead to a long career in the environmental field. She is also building important relationships and more deeply learning what communities like Watts need.

Flores has generated valuable insights for improving urban forestry efforts, particularly in communities like Watts where some residents fear that large trees will tear up their neighborhood. Flores thinks there are ways to shift that point of view, including giving residents a say in what types of trees are planted and providing funds for tree maintenance beyond the first two years of establishment.

Guerrero also talked about the health benefits of trees, such as cleaner air and relief from extreme heat in a neighborhood facing higher temperatures than most of the City of Los Angeles. Guerrero described one street in particular to illustrate the effect of his crew’s work: “There was not a single tree on that street. National Geographic did a study of that particular street, like how bad the air quality is, how hot it gets, right? We went in there and planted about 40 trees on that street. And it looks amazing — the residents love it.”

“I always say that I want to change the world, and I was told to start with my community.”

EDDIE GUERRERO

“You would think everybody loves trees, but we definitely get backlash. Back in the day, they were planting trees without really knowing the biology of the tree and how it grows. When we explain the benefits, and how we’re picking the right species of trees and making sure that it’s planted the proper way this time around, people open up.”



Maria Flores works with North East Trees to plant trees on a residential street in Watts. Photo credit: UCLA LCI

“I honestly can’t see myself doing anything else. I definitely see myself in this field, taking on more roles, doing more community outreach, and really connecting with residents.”

MARIA FLORES

No-cost solar program reduces energy bills and relieves residents from heat



Moneik Johnson in her home in Watts. Photo credit: Moneik Johnson

BACKGROUND

This case study explores how TCC dollars have helped Watts residents achieve energy cost savings through rooftop solar and energy efficiency projects. Specifically, the story highlights how no-cost solar installations through the TCC-funded “Solar Watts” program have benefited Moneik Johnson and Sandra Garcia. See [page 61](#) for more information about this project.

The interviews for this case study were conducted in June 2021 and January 2023, respectively.

MONEIK JOHNSON is a longtime and active member of the Watts community, where she has owned her home for more than two decades. With fewer green spaces than other parts of the region, Watts is a disproportionately hot community — and it’s only getting hotter due to climate change. Johnson has experienced this heat firsthand. Despite the heat, she has never had air conditioning in her home. She has struggled to pay her electricity bills, even without the major expense of cooling her home to a comfortable level.

But this is changing. After having solar panels installed on her home for free through Watts Rising’s home solar program, she is already experiencing major benefits. Once the panels were turned on, she immediately began seeing a difference in her electricity bill. “I was really happy. It came down tremendously... This last bill was the best bill. I’ve never seen a bill like that since I’ve been a DWP customer,” Johnson said.

Before having solar installed, Johnson was making monthly payments to pay off her electricity bill debt. Now, she can pay the bill in full. “I’m able to just pay it all at once as opposed to making payments on it. It’s always been a thing that I’m making payments, and to be able to pay it off feels good.”

Lower electricity bills mean that Johnson can now afford to keep her home cooler and more comfortable. She plans to

get air conditioning in the winter, when she might be able to take advantage of sales.

“I know that now it’d be affordable for me to get air conditioning. I’ve been wanting it because it’s so hot.”

MONEIK JOHNSON

Johnson first heard about the Solar Watts program through a local family roofing business, where she has worked as an office manager for over 20 years. The company was working with GRID Alternatives, so Johnson knew she could trust the organization. When the solar program launched, she was one of the first in line to have GRID Alternatives install solar panels on her home.

“The company I work for does a lot of work for GRID Alternatives, so I saw that Solar Watts was a real program. I knew they weren’t making homeowners pay.”

MONEIK JOHNSON

Johnson has been sharing her positive experience with installing solar to encourage others in her community to sign up for the program. “I’ve been telling all my neighbors that I know. It’s a good thing to have.”

SANDRA GARCIA has lived in Watts with her mother and younger brother since 2017, when she purchased her first home amid skyrocketing rents. Having grown up in South Central Los Angeles, she has lived in several different neighborhoods. When she moved to Watts, she found a strong sense of community among neighbors who watch out for one another.

As a member of the Watts Rising Community Advisory Group (a group of residents, business leaders, and other community stakeholders who help guide Watts Rising activities), Garcia is no stranger to TCC. She has seen how the many TCC-funded projects have begun to benefit her community. “My neighbors are passionate about it. They want a safer and healthier community for their kids, for themselves, and for their parents. I see the improvements already. Other places in LA are changing due to gentrification, but I have the sense that it’s different here — it’s community led.”

Garcia first learned about Solar Watts during a Community Advisory Group meeting, when a GRID Alternatives staff member presented on the free solar installation program. If it had been presented in any other context, she said, she would have been immediately skeptical that the panels could be installed for free. As the information came from a trusted source — an organization where a Watts Rising colleague worked — she trusted it and decided to apply for the program.



Sandra Garcia, a homeowner in Watts. Photo credit: Sandra Garcia

“I know solar panels cost a lot of money. If I had heard it anywhere else, I’d be like, what are you talking about? How is it free?”

SANDRA GARCIA

After the panels were installed, Garcia got the first updated power bill that August. During the hottest time of the year, the bill reflected the financial help that solar panels can bring to residents. These savings have been a relief to her budget. Garcia attended UCLA for her undergraduate and master’s degrees, and she is currently pursuing a Ph.D. there. And while she worked full time during her master’s studies, she has had to cut back her work hours since starting her doctoral studies, which cuts into her savings.

“It was the hottest month of the last few years. It was 100 degrees for days and days. We had AC on every day and night. And our bimonthly bill was still \$100 less than normal. It was a huge difference.”

SANDRA GARCIA

Now, the extra money she saves on energy goes straight into replenishing her savings.

And it’s not just air conditioning that has gotten cheaper and more environmentally friendly for Garcia: charging her electric vehicle (EV) has also gotten easier. “I used to notice my bill go up if I charged my EV more than five times in a month. Now, I feel very comfortable charging, and it’s fantastic because I have to commute. It’s made my worry about charging at home just nonexistent. With both that and the air conditioning, it just gave me peace of mind, and it’s more comfortable now.”

In addition to lower bills to cool her home and charge her car, Garcia’s pocketbook was saved by GRID Alternatives’ roof upgrade program. Before getting solar panels, her home needed a stronger roof, which would usually come with a \$10,000 price tag. But GRID Alternatives was able to cover half of the cost, and since Garcia knew she would need to upgrade her roof soon anyway, she signed up for a payment plan with a local roofer for the other half.

In the coming years, Garcia is saving for a down payment on a new home, and the savings from the Solar Watts panels are helping her toward that goal. “The savings from the solar panels increase my financial bandwidth and gives me more options.”

Watts Rising partners pivot to address pandemic



BACKGROUND

This story explores how Watts Rising partners adapted TCC-funded projects and engagement to meet changing community needs when the pandemic struck. From safe food distribution to accessible health and safety resources, Watts Labor and Community Action Committee (WLCAC) and Urban Peace Institute leveraged TCC funds and community networks to provide information and services in an uncertain time. To learn more about the specific projects that these partners manage, see [pages 55 and 73](#).

Interviews for these case studies were conducted from December 2020 to December 2021.

Volunteers sort produced at a food distribution event during the pandemic in 2020. Photo credit: MudTown Farms

ELDER MICHAEL CUMMINGS is a Pentecostal pastor and a gang interventionist fondly referred to as “Big Mike” in the Watts community. As executive director of We Care Outreach Ministries, a nonprofit organization dedicated to helping deter youth from engaging with gangs, crime, and drugs, Cummings is dedicated to keeping Watts youth safe and defusing tensions among community members.

We Care Outreach Ministries is one of the organizations that runs the Safe Passages to Schools Program, which trains local adults to supervise students traveling to and from school. The program is a component of the TCC-funded WalkBike Watts project, which has installed pedestrian infrastructure to make the neighborhood more walkable and bikeable. To maximize the use of this infrastructure, the Safe Passages puts more people on the street, thereby helping create an environment that feels safe, active, and vibrant. To support this effort, community engagement is an essential component of this project.

When schools went remote because of the COVID-19 pandemic, We Care Outreach Ministries pivoted to help feed community members. Given its expansive volunteer network, which grew with TCC funding, We Care Outreach Ministries was well placed to reach community members and jump into action to distribute resources.

With food donations from private donors, We Care Outreach Ministries distributed meals to community members, while volunteers from the Safe Passages to Schools program helped make the process safe and healthy. To minimize COVID-19 transmission, the volunteers helped make sure that residents picking up food were wearing masks and staying six feet apart in line.

“[We] made sure we could keep the peace as people waited [in long lines] to come and be safe and get their food.”

ELDER MICHAEL CUMMINGS



A 2020 food distribution event by East Side Riders and We Care Outreach. Photo credit: Spectrum News 1SoCal Twitter

JACKIE VALLADARES is a native Angeleno and program coordinator at the Urban Peace Institute, a nonprofit focused on community safety. UPI co-runs the Safe Passages to Schools program with We Care Outreach Ministries. UPI helps train a network of adults to create safe walking routes.

Prior to the pandemic, UPI relied heavily on in-person engagement. As Valladares said, “we were holding meetings to address public safety concerns and also infrastructure challenges.... a lot of it was face-to-face interactions.” When the shelter-in-place order was issued, UPI responded quickly to continue community engagement virtually. TCC resources had helped UPI expand the Safe Passages program and grow the volunteer network. With that in place, UPI could pivot to use its resources to share public health information.

“We had a good momentum of engaging everyone... there were so many things happening quickly, [so] we doubled our virtual meetings to twice a month.”

JACKIE VALLADARES

Through its pre-pandemic community connections and communication channels, UPI was able to disseminate vital public health information to Watts residents. The team leveraged the newly virtual meetings to share critical pandemic updates with the community — statistics, messages from the mayor and governor, and information on available resources. They made sure to answer questions and dispel myths to ensure the community was being misled by rumors or inaccurate information. “We were updating them on the COVID-19 numbers [and] any resources that the community members would have benefited from.”



Urban Peace Institute hosts a Zoom meeting of the Watts School Safety Collaborative, a TCC-sponsored initiative that convenes parents for school safety initiatives. Photo credit: Urban Peace Institute Instagram @urbanpeaceinstitute April 2021

AVA POST, a longtime environmental activist in Watts, is on the front lines of battling food insecurity, which deepened during the pandemic. As program coordinator at WLCAC, Post is on a team that rescues fresh produce that would be wasted and redirects it to Watts residents through free distribution events. This effort is run through MudTown Farms, a WLCAC project that provides food collection and distribution. The project has received TCC support since Spring 2021, when TCC funds enabled it to open a new garden location.

The program was more important than ever during the pandemic: “The need for produce has gone up. I know pretty much everyone’s been affected food security-wise.” Before the pandemic, the food distribution was set up in a grocery store format — volunteers sorted food onto shelves for residents to pick out. “We had to adapt.... We started to pre-bag all the produce, and we started a drive-through as well.”

“It’s been great to be able to continue to offer the [food distribution] service especially when people need it the most.”

AVA POST

HALEEMAH HENDERSON, WLCAC project manager for MudTown Farms, works with Post to distribute food to the community. Henderson described how the pandemic caused challenges for engagement and capacity building: “People are at the center of [MudTown Farms]. To do it the way we want to do it requires that people are together in a space interacting. ...That’s a lot harder [during the pandemic].”

Nevertheless, MudTown Farms and other projects adapted. Henderson detailed steps the team took to adapt community engagement efforts — not only to engage Watts residents about MudTown Farms, but to support other organizations’ outreach efforts. Her team shifted toward more online outreach when the pandemic began, especially through social media platforms like Instagram. They moved in-person meetings and classes to Zoom and passed out flyers from other organizations at food distribution events. With fewer chances for in-person interaction with residents, collaborative outreach helped maximize the impact of each public engagement opportunity that arose.

“How do we still serve folks and still build capacity and still engage people? [We’re] just coming up with new ways to do things.”

HALEEMAH HENDERSON

Residents harvest new skills at community farms



BACKGROUND

This case study explores how TCC-funded farms and gardens provide professional and personal growth opportunities for Watts residents, from students to seniors. It highlights Rudy, a high school student who gained leadership skills, fresh produce, and a sense of calm interning at the Watts Community Tech Garden project, and Reginald Sales, a Watts elder who is adding tools to his toolbox by working at MudTown Farms. See [page 69](#) to learn more about other urban greening projects underway in Watts.

The interviews for this story occurred in January 2020 and September 2023.

Rudy (second from left) and colleagues at a community engagement event at the garden in September 2019.

Photo credit: UCLA Luskin Center for Innovation

RUDY has lived in Watts his whole life with his parents and sister. He is a junior at David Starr Jordan High School: “All my teachers want the best for me. They pour their heart and soul into everything that they teach, and I’m grateful for that,” he said. When he’s not hanging out with friends, he’s working in the Watts Community Tech Garden. The garden was started by the nonprofit Community Healing Gardens, which provides job training and healthy food, and Los Angeles Cleantech Incubator, a public-private partnership geared toward job creation and clean technology acceleration).

He first became involved with the garden as a student at Markham Middle School. He took an elective class in sixth grade that taught topics such as photosynthesis and plant life cycles. Then in ninth grade, Rudy began volunteering with the garden through a program called College Track, which provides participating students with a scholarship that goes into a fund for future college expenses. Inspired by his experience in the garden, Rudy is interested in studying fields such as botany, agriculture, and ornithology in college.

The summer after his sophomore year, Nicole Landers, co-founder and executive director of Community Healing Gardens, hired Rudy as an intern to take on additional duties in the garden. Rudy welcomed the opportunity to collaborate with his workers and expand his responsibilities main-

taining the garden. “Nicole asked me, ‘Hey, Rudy, would you like to be an intern at the garden?’ And I was ecstatic... I was crying.... Because I’ve been familiar with it for such a long time. Now, I actually got to work there. It was just so cool.”

Rudy’s internship has helped him develop leadership skills, financial literacy, and confidence. As a result, he opened a bank account and started participating more in school.

“Without the garden, my [class] participation points would be very low. But now I’m like either the first or the second or the third to raise my hand. The garden gave me the ability to step up for myself and grow, which I am very grateful for.”

RUDY

“[The experience] taught me leadership skills. I gained ownership and accountability,” Rudy said. He also has a new role model. “Nicole inspires me so much because the garden helps the community by giving them fresh produce and making the kids open up their eyes into, ‘Oh, I can eat this instead of that,’” he added.

A major perk of working in an edible garden is the accessibility of fresh produce. Rudy sometimes brings home some of the fresh produce grown in the garden, and his parents cook with it. “Both of my parents are disabled. And this internship

has really given me the ability to give back to my parents because [they] have sacrificed so many things for both me and my sister.” Recently, Rudy brought home some squash that his mom added to a chicken vegetable soup. Rudy noted that the cucumbers are his favorite — in fact, he said they helped him shift toward a healthier diet. “[Interning at the garden] gave me access to fresh produce. And then I fell in love with the cucumbers there... instead of munching on the chips, I would munch on the cucumbers.”

REGINALD SIMMS has lived in Watts for nearly 50 years, after moving from Louisiana with his mother at age 10. Now, he works full-time at MudTown Farms, a TCC-funded urban farming and food distribution program, as a maintenance person, groundskeeper, and tour guide. Like the Watts Community Tech Garden, MudTown Farms was started by Watts Labor and Community Action Committee (WLCAC) to provide locally grown produce, job training, and other services to strengthen the community and its food system.

Simms heard about MudTown Farms from Haleemah Henderson (a manager for the project, profiled on [page 56](#)) at WLCAC’s grand opening event for the Jordan Downs Housing Redevelopments (see [page 53](#) to learn more). When Henderson told Simms where the farm was located, he realized it was across the street from a past home of his. “I was like, wow, I want to work there. I grew up in front of there,” he said. He told Henderson as much, and she told him a job might open up soon — so he stayed in contact for eight months. In the ninth month, when he reached out, she called him in for an interview — and shortly thereafter, he had the job he had hoped for.



Reginald Simms (center) at MudTown Farms with coworkers Andre (left) and Jacob (right). Photo credit: UCLA Luskin Center for Innovation

Being involved in the garden has benefited Rudy’s mental health, too. There aren’t many other green spaces in his neighborhood. “The garden gives me an opportunity to just breathe in that fresh air and... put my hands into the dirt. School is stressful. But every time I go to the garden, it’s like, ‘OK, school aside, let’s focus on the garden.’ And then when I focus on the garden, my stress would go away.”

Simms started at MudTown Farms in March 2020, just as the COVID-19 pandemic was shutting down the country. He worked independently on the farm for the first two years of his tenure, maintaining the facility until the pandemic wound down and staffing levels could be increased. In 2022, he gained two new colleagues, Jacob and Andre, who brought valuable skills and experience in urban farming. Simms relished the chance to learn new skills from them, from preparing land for crops to harvesting the fruit and vegetables grown.

“I’m thankful for the two young men that I work alongside because they are already skilled farmers. For example, I learned how to tell when a watermelon is ripe — it’s ready when the stem is brown or falls off.”

REGINALD SIMMS

The farmers’ expertise has led to a productive farm, and Simms described his satisfaction watching his work lead to growing, healthy produce — and seeing the community reap the benefits. “It’s really fun just watching this stuff grow. When you get to see the fruits of your labor, you know you did something great. When we get the food out to the community, you can see the joy... it’s free, and it’s fresh, and it will stay fresh for a week. Our bell peppers can last in your refrigerator for 30 days because they are so fresh.”

Simms described how MudTown Farms has benefited the community of Watts through the distribution of free, fresh produce. He described the development of the farm as one piece of a broader change that he sees in his community, due to investments throughout the neighborhood as part of Watts Rising. “A lot of people in this community are involved with the work that’s being done with the redevelopment. Change is good when it’s [done by] the people who have been there when there was no change... I just feel really, really great about the future for our young people here...”



Watts Earth Day Celebration hosted by Watts Rising Collaborative in April 2023. Photo Credit: Watts Rising Collaborative

THE COUPLING OF TRANSFORMATIVE PLANS alongside greenhouse gas (GHG) emissions-reduction projects is one of the central elements of TCC that separates it from all other California Climate Investments. For Round 1 of TCC, applicants were required to develop three transformative plans: a community engagement plan, a displacement avoidance plan, and a workforce development plan. Together, these plans are designed to ensure that TCC investments reflect the community’s vision and goals, bring economic opportunities to disadvantaged and low-income communities, and minimize the risk of gentrification and displacement of existing residents and businesses. Applicants were provided a menu of strategies for developing their plans and encouraged to choose those that spoke to the site’s priorities and strengths. The following section provides an overview of how Watts Rising structured its transformative plans and what progress has been made toward implementation.

Community Engagement Plan



Charles Drew University's Youth Ethnographers administering the Watts Community Survey. Photo Credit: Watts Rising

THE WATTS RISING COMMUNITY ENGAGEMENT PLAN

(CEP) builds on a long history of community leadership and engagement. Community engagement is an integral component in all phases of the Watts Rising Collaborative. The CEP spells out an overarching process to ensure robust community involvement for the entire Watts Rising TCC initiative and complements multiple project-specific outreach activities (described in each project's respective profile). The Housing Authority for the City of Los Angeles (HACLA) is leading community engagement efforts. This centers on the creation of the Watts Rising Community Advisory Group, formerly known as the Watts Rising Leadership Council, the advisory body for Watts Rising. Charles Drew University will lead an annual community survey administered to Watts residents.

Recent Accomplishments*

- » Earth Day event hosted in April 2023 to celebrate tree planting efforts and inform the community about projects and plans
- » Watts Rising Public Forums conducted in a hybrid environment with either in-person or virtual meetings options held bimonthly with 30-50 participants

**Includes only accomplishments during the last fiscal year (July 2022 through June 2023)*

The Watts Rising Community Advisory Group is composed of representatives of key stakeholders, as well as Watts residents, business owners, and community leaders. The Community Advisory Group meets monthly to discuss relevant topics, and meetings are open to the public. The Community Advisory Group hosts an annual open house.

Given the collaborative nature of the initiative, Watts Rising organizes the 19 project partners into four Project Partner Hubs around the following project themes: (1) Sustainable Housing, (2) Urban Greening, (3) Active Transportation,

and (4) Low-Carbon Transportation. Members focus on implementing one or more projects in those four areas. Community engagement events often plan to involve multiple projects both within and among hubs.

HACLA leads the development of messaging and avenues for communications. This includes the development and maintenance of a website and social media accounts. Finally, with Charles R. Drew University of Medicine and Science and the Watts Community Studio (the data partner), Watts Rising issues an annual community survey.

Community Engagement Plan

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** Project based throughout grant term
- » **Project lead:** HACLA
- » **TCC grant funds:** \$1,758,252
- » **Leveraged funds:** \$565,200

Cumulative Progress Through FY 2022-2023

- » 10 members of the Community Advisory Group attended monthly meetings
- » 6 Street Team members provided additional assistance at local events and supported project partners' community engagement goals

Responses to COVID-19

- » All public forum meetings conducted online

Displacement Avoidance Plan



Watts Century Latino Organization’s Navidad en el Barrio food holiday giveaway on December 2022. Photo Credit: Watts Century Latino Organization

THE WATTS RISING DISPLACEMENT AVOIDANCE PLAN (DAP)

directly supports one of Watts Rising’s key goals: to prevent displacement and its impact on physical and mental health. Led by the Los Angeles Mayor’s Office of Economic Opportunity (MOEO) and Watts Century Latino Organization (WCLO), the Watts Rising DAP focuses on six key areas: (1) production of affordable housing, (2) preservation of affordable housing, (3) tenant protections and support, (4) neighborhood stabilization and well-being, (5) protections for small business, and (6) business stabilization and wealth building.

This program year, a notable milestone was momentum gained for a policy intervention to directly prevent potential displacement indirectly influenced by the Jordan Downs Revitalization and other large-scale investments in the Watts community. MOEO spearheaded the community engagement, data collection, policy analysis. It also led the efforts to identify a pathway to adopt a geographic preference policy for non-Jordan Downs Watts residents to receive a weighted preference when applying to the lottery for Jordan Downs units. The policy is intended to mirror the City of San Francisco’s Neighborhood Resident

Recent Accomplishments*

- » 110 tenants accessing case management, advocacy or legal services
- » 64 residents engaged at workshops about affordable housing opportunities
- » 32 attendees at 1 tenants right education workshop
- » 23 attendees at two financial literacy workshops
- » 4 workshops for small businesses such as Small Business Meet-Up and Jobs & Economic Development Incentive Zones with 32 attendees

**Includes only accomplishments during the last fiscal year (July 2022 through June 2023)*

Preference policy, and address the DAP task of facilitating the revision/adoption of an ordinance to address displacement. In spring 2022, the Watts geographic preference policy motion was introduced by Councilman Joe Buscaino (Council District 15), adopted by the City Council Housing Committee and subsequently, the full City Council. It calls for HACLA to conduct further feasibility studies to implement the policy. This initial legislative accomplishment has promise to tangibly and directly disrupt displacement, particularly for Watts residents who live close to the Jordan

Downs redevelopment, which is increasing nearby property values. WCLO applied for, competed in a crowd sourcing competition, and ultimately received a \$200,000 grant via the Buscaino Community Grant Program. WCLO applied for the grant to cover the costs of additional outreach workers to identify Watts residents vulnerable to displacement, possibly due to COVID-19, and refer them to rental and legal assistance providers. This work was intended to build upon WCLO's co-hosting of a successful rental assistance clinic which served more than 30 individuals.

Displacement Avoidance Plan

Project Details

- » **Launch date:** April 2019
- » **Completion date:** July 2024
- » **Project leads:** MOEO; WCLO
- » **TCC grant funds:** \$0
- » **Leveraged funds:** \$190,000

Cumulative Progress Through FY 2022-2023

- » 196 tenants accessed case management, advocacy, or legal services
- » 17 small business workshops held with 226 attendees
- » 6 workshops to inform residents about affordable housing opportunities held with over 60 attendees
- » 4 tenants rights education workshops held with 128 participants
- » 4 financial education workshops held, including a tax preparation information session with 56 attendees
- » 2 financial literacy workshops held, including those on budgeting and saving accounts with 23 participants

Responses to COVID-19

- » Watts Century Latino Organization hosted its annual Navidad En El Barrio event using COVID-19 safe protocols. The event included distribution of two weeks of food, COVID-19 personal protective equipment, and general anti-displacement information to roughly 250 families.
- » Watts Century Latino Organization provided legal assistance referrals to UnidosUS for legal advocacy to assist families with increased displacement vulnerability due income decreases
- » Conducted a small business needs assessment with questions regarding the impact of COVID-19 on business operations to shape displacement avoidance interventions
- » Host virtual renter and small business resource workshops

Workforce Development Plan



GRID Alternatives solar installer trainee. Photo credit: GRID Alternatives Greater Los Angeles

IN SUPPORT OF WATTS RISING'S economic goals of increasing access to training, high-quality jobs and careers, and youth preparation for careers in GHG-reduction fields, the Watts Labor Community Action Committee (WLCAC) and GRID Alternatives Greater Los Angeles (GRID Alternatives) are leading the Watts Rising Workforce Development Plan (WDP) through their programs. Combined, they expect to train 70 Watts residents with the skills needed to be employed in green jobs. WLCAC will lead the Mega Watts Electric Vehicle Car Share Workforce Development and Job Creation Program where will be recruited through Jordan Downs Forward and three Watts Los Angeles WorkSource Centers.

WLCAC will offer free training to 30 Watts residents in a local community college course on electric vehicles. The Mega Watts project plans to hire six residents; three operations associates to ensure electric vehicles are “fully charged for resident’s use and vehicle inventory,” and three customer service associates to provide customer support and assist with outreach and marketing.

Recent Accomplishments*

- » 14 participants completed the GRID Alternatives’ Installation Basics Training program
- » 2 graduate trainees from the GRID Alternatives’ Installation Basics Training program have secured full-time employment*

**Includes only accomplishments during the last fiscal year (July 2022 through June 2023)*

GRID Alternatives will recruit five cohorts of eight Watts residents for the Solar Watts Workforce Development Program which provides 20 hours of classroom training, 162 hours of in-field training, and 10 hours of Occupational

Safety and Health Administration training. Participants will receive a comprehensive education about electricity, solar photovoltaic installation, and worksite hazards.

Workforce Development Plan

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** December 2024
- » **Project leads:** GRID Alternatives, WLCAC
- » **TCC grant funds:** \$327,386
- » **Leveraged funds:** \$5,300

Cumulative Progress Through FY 2022-2023

- » 44 individuals recruited for the GRID Alternatives' Installation Basics Training Workforce Development Program
- » 36 trainees completed the GRID Alternatives' Installation Basics Training Workforce Development Program



Members of the Safe Passages to School Program. Photo credit: Urban Peace Institute

TCC APPLICANTS CHOSE FROM A WIDE ARRAY OF PROJECT TYPES in their effort to achieve the three objectives of TCC, namely: (1) reductions in GHG; (2) improvements in public health and environmental benefits; and (3) expanded economic opportunity and shared prosperity. These align with the suite of California Climate Investments overseen by various state agencies.* This alignment was built into TCC to streamline the proposal and indicator tracking process. For example, the California Air Resources Board (CARB) has developed GHG emissions reduction quantification methodologies and co-benefit assessment methodologies for each project type under the existing suite of California Climate Investments. These methodologies can then be used by TCC grantees (and technical assistance providers, such as the LCI evaluation team) to estimate the benefits of each project. The following section provides an overview of the Watts Rising projects, aggregated by project type, that will use TCC dollars to achieve the aims of the program.

* For more information about California Climate Investments, visit: <http://www.caclimateinvestments.ca.gov/>

Affordable Housing and Sustainable Communities Project



Apartment building of Jordan Downs Redevelopment S2, Sky at Jordan Downs. Photo credit: The Michaels Organization

INCREASING THE DENSITY OF AFFORDABLE HOUSING aims to reduce vehicle miles traveled, along with lower housing and travel costs for Watts residents.** An affordable housing complex, called Jordan Downs Phase S2 or Sky at Jordan Downs, was constructed by The Michaels Organization with support from the City of Los Angeles and the Housing Authority of the City of Los Angeles (HACLA). It includes 81 affordable housing units and serves as a center for community education and engagement. The East Side Riders Bicycle Club, a local leading active transportation and mobility justice organization, has facilitated educational sessions at Jordan Downs, including a Bicycle Education and Safety Training (BEAST), in addition to hosting community bike rides. These events have promoted clean modes of transportation, with the aim to further decrease vehicle miles traveled.

**For a definition of affordable, see Appendix A of the FY 2017-2018 AHSC Program Guidelines.

Recent Accomplishments*

- » As of June 2023, construction was more than 90% completed.
- » Delays for the full completion are related to final connections for utilities to the new units.

* Includes only accomplishments during the last FY (July 2022 through June 2023)

Jordan Downs Phase S2

The **Jordan Downs Phase S2** constructed 81 units of housing, 80 of which are affordable. Located at Grape Street and Century Boulevard, the development consists of 18 one-bedroom units, 33 two-bedroom units, 29 three-bedroom units, and one four-bedroom unit. One unit is for an on-site property manager. The East Side Riders organization provides bicycle education and training classes for families and youth in the development.

Project Details

- » **Launch date:** June 2022
- » **Completion date:** October 2023
- » **Project lifetime:** 30 years
- » **TCC grant funds \$13,250,000**
- » **Leverage funds \$26,446,312**
- » **Project lead:** HACLA and The Michaels Organization

Lifetime Benefits

- » **GHG emissions reductions:** 8,169 MTCO₂e
- » **Energy cost savings:** \$3,515,959
- » **VMT reductions:** 21,416,643
- » **Trees planted:** 25
- » **Direct jobs from TCC dollars:** 58.7 FTE
- » **Indirect jobs from TCC dollars:** 35.7 FTE
- » **Induced jobs from TCC dollars:** 46.9 FTE

Cumulative Progress Through FY 2022-2023

- » Construction began in Summer 2021, by June 2023 construction was 90% complete
- » 7 Bicycle Education and Safety Training (BEAST) classes held with about 40 attendees
- » 1 community bike ride held

Responses to COVID-19

- » East Side Riders Bicycle Club modified its BEAST class program to be COVID safe.

Food Waste Prevention and Rescue Project



MudTown Farms's Harvest Giveaway on November 2023. Photo credit: MudTown Farms Instagram

THE WATTS LABOR COMMUNITY ACTION COMMITTEE leads the MudTown Farms food rescue project, which reduces food waste while increasing local access to fresh produce. As part of this project, Food Forward, a nonprofit, is rescuing 108 tons of food from the LA Produce Mart annually. This food is sorted by trained volunteers and distributed to residents at regularly occurring events. Food that cannot be redistributed is composted which can be used by other Watts Rising projects or by residents. Volunteers are recruited and trained to assist with food distribution and composting efforts. This process helps to divert the amount of organic material sent to landfills, where it decomposes in the absence of oxygen and releases methane, a potent GHG.

Recent Accomplishments*

- » 169 tons of food received from the Los Angeles Produce Mart
- » 471 tons of food redistributed directly by MudTown Farms
- » 252 tons of food redistributed through partner organizations
- » 21 tons of green waste composted

** Includes only accomplishments during the last FY (July 2022 through June 2023)*

MudTown Farms

MudTown Farms is collecting and redistributing food waste for community members. The goal is to collect nine tons of food per month (or 108 tons of food per year) from LA Produce Mart. Food is sorted and either redistributed to residents or diverted for compost. Compost is distributed to local growers and residents as well.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** September 2025
- » **Project lifetime:** 3 years
- » **TCC grant funds:** \$392,110
- » **Leverage funds:** \$4,579,393
- » **Project lead:** Watts Labor and Community Action Committee

Lifetime Benefits

- » **GHG emissions reductions:** 879 MTCO₂e
- » **Edible food rescued:** 294 tons
- » **Direct jobs from TCC dollars:** 4.4 FTE
- » **Indirect jobs from TCC dollars:** 1.1 FTE
- » **Induced jobs from TCC dollars:** 1.7 FTE

Cumulative Progress Through FY 2022-2023

- » 15,186 residents served via food redistribution
- » 810 volunteers trained and assisted in quality control, food rescue, and composting
- » 743 tons of food collected from the LA Produce Mart and distributed at MudTown Farms or partner agencies
- » 471 tons of food redistributed directly to residents by MudTown Farms
- » 252 tons of food redistributed through partner agencies, such as churches or community-service organizations
- » 21 tons of green waste composted at MudTown Farms

Responses to COVID-19

- » Ensured food distribution followed COVID-19 public health safety guidelines by pre-bagging produce and distributing produce through a drive-through process
- » Used social media for outreach and distributed other organizations' flyers during food distribution events
- » Shared information with residents at food distribution events about Mayor Garcetti's L.A. Connected Program, an initiative to provide CARES Act application support resources

Low-Carbon Transit Operations Project



LADOT An electric DASH Bus displayed at Watts Rising Earth Day event on April 2023. Photo credit: Watts Rising Collaborative

THE DASH BUS ELECTRIFICATION PROJECT, led by the Los Angeles Department of Transportation (LADOT) is replacing 10 clean natural gas or propane-fueled buses with battery-electric buses. This will reduce the emissions of local air pollutants and greenhouse gases. Five electric chargers will be installed to support these buses. Additionally, LADOT plans to increase the frequency of service from every 20 minutes to every 15 minutes, thereby improving local mobility options.

LADOT committed that the first electric DASH buses will be deployed in Watts, allowing the community to be on the forefront of greening the bus system.

Recent Accomplishments*

- » Full fleet of 10 buses produced and delivered to LADOT
- » Buses are in the inspection phase.

** Includes only accomplishments during the last FY (July 2022 through June 2023)*

DASH Bus Electrification

The **DASH Bus Electrification** project is replacing 10 CNG/propane buses with 10 battery electric buses. Additionally, five electric bus chargers will be installed. LADOT will be responsible for all operation and maintenance.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** July 2024
- » **Project lifetime:** 10 years
- » **TCC grant funds:** \$1,700,000
- » **Leverage funds:** \$6,893,075
- » **Project lead:** LADOT

Lifetime Benefits

- » **GHG emissions reductions:** 36,435 MTCO₂e
- » **Travel cost savings:** \$310,025
- » **VMT reductions:** 1,624,630
- » **Direct jobs from TCC dollars:** 3.4 FTE
- » **Indirect jobs from TCC dollars:** 2.6 FTE
- » **Induced jobs from TCC dollars:** 3.4 FTE

Cumulative Progress Through FY 2022-2023

- » 10 buses in inspection phase

Responses to COVID-19

- » Due to COVID-19 restrictions, the bus manufacturing factory in Lancaster was shut down multiple times, delaying production.

Low-carbon Transportation Project



MegaWatts EV Car Share vehicle displayed at Watts Rising Earth Day event on April 2023. Photo credit: Watts Rising Collaborative

GREEN COMMUTER and the **WATTS LABOR COMMUNITY ACTION COMMITTEE** are partnered on the Mega Watts Electric Vehicle Care Share project. This project will deploy 15 electric vehicles (EVs) in the community as part of a car-share program, and is planning to install 24 EV charging stations. Increasing the fleet of EVs can help reduce the need for cars that run on fossil fuels. The Watts Labor Community Action Committee is working to offer EV training through its Worksource Center; connecting residents interested in servicing electric vehicles through a partnership with a community college, see [page 51](#) for more information about the Watts Rising’s Workforce Development Plan.

The Mega Watts community engagement efforts center on events and communication aimed at education. They plan to host annual Earth Day, National Drive Electric Week, and Ride Share Week events, as well as six Ride and Drive events throughout the grant period.

Recent Accomplishments*

- » 115,998 kWh of energy used from EV charging infrastructure
- » 27 users registered via smartphone application downloads for the MegaWatts Car Share Program
- » 15 EV charging stations operating within the project area
- » 7 Tesla Model Ys and 7 Chevy Bolts purchased for the program

** Includes only accomplishments during the last FY (July 2022 through June 2023)*

They will host educational events, information sessions and driver’s license training workshops. This project will also conduct door-to-door and online outreach to recruit members for its car-share service. In addition, a local Watts

car-share associate will be hired to oversee the daily operations including reservations and car maintenance of EV fleets and an all-electric car-sharing program.

Mega Watts Electric Vehicle Car Share

The **Mega Watts Electric Vehicle Car Share** program is deploying 15 electric vehicles used for community car sharing. The project is installing 19 electric vehicle chargers (11 Level-2 and 8 DC fast chargers) at three different locations within the project area.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** March 2025
- » **Project lifetime:** 3 years
- » **TCC grant funds:** \$1,833,862
- » **Leverage funds:** \$615,881
- » **Project Lead:** Watts Labor and Community Action Committee; Green Commuter

Lifetime Benefits*

- » **GHG emissions reductions:** 2,618 MTCO₂e
- » **Direct jobs from TCC dollars:** 8.2 FTE
- » **Indirect jobs from TCC dollars:** 3.6 FTE
- » **Induced jobs from TCC dollars:** 5.8 FTE

Cumulative Progress Through FY 2022-2023

- » The program soft launched in June 2023, with services starting at Freedom Plaza in Watts.
- » 130,258 kWh of actual energy usage from installed EV charging infrastructure
- » 27 users are registered via smartphone application downloads.
- » 7 Tesla Model Ys and 7 Chevy Bolts were purchased.
- » 6 Level-2 and 4 Level -3 chargers are active at Watts Labor Community Action Committee.
- » 3 Level-2 and 2 Level -3 chargers are active at Freedom Plaza.

Responses to COVID-19

- » Classes were suspended due to COVID-19.
- » Green Commuter loaned three Nissan Leaf EVs to the Senior Meal Delivery program at WLCAC starting in August 2020. In December 2020, one of the Leafs was swapped for an EV Star Cargo van.

* Estimated benefits were based on original anticipated project outcomes from 24 electric vehicle chargers.

Rooftop Solar and Energy Efficiency Projects



GRID Alternatives LA installing solar panels on a Watts home September 2021. Photo credit: GRID Alternatives Greater Los Angeles

GRID ALTERNATIVES and **HABITAT FOR HUMANITY** are leading two low-income weatherization programs that are providing energy cost savings to residents while avoiding GHG emissions associated with electricity generation in part from fossil fuels. GRID Alternatives Greater Los Angeles is installing approximately 172.8 kilowatts of solar panels on 54 residences in the site area, for an average project size of 3.2 kilowatts. Habitat for Humanity Greater Los Angeles is providing energy efficiency upgrades for 180 homes. Improvements may include low-flow faucets and shower heads, LED lighting, Tier 2 power strips, vacancy/motion sensors, ceiling fans, window unit HVAC system replacements, smart thermostats, refrigerant replacement, water heater blanket, water heater replacement, and more. Both projects will reduce energy costs for residents.

These projects developed an online Solar Watts and Energy Efficiency portal for residents, which enables them to sign up for an assessment, as well as reach online customer support. The Solar Watts and Energy Efficiency projects plan to conduct outreach via events, direct mail, digital ads, and social media to all single-family homes in the TCC site.

Recent Accomplishments*

- » Solar Watts installed nine solar photovoltaic system on single-family homes, resulting in 25.8 kW of energy through solar technology.
- » The Energy Efficiency project retrofitted 10 homes, resulting in 391 different efficiency measures installed, such as water heater replacements and low flow faucets.

** Includes only accomplishments during the last FY (July 2022 through June 2023)*

Solar Watts

The **Solar Watts** project is installing solar photovoltaic systems (about 172.8 kilowatts) on approximately 54 single-family homes in the project area. GRID Alternatives will work with subcontractors to provide technical assistance during the post-installation warranty period.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** March 2025
- » **Project lifetime:** 30 years
- » **TCC grant funds:** \$1,315,152
- » **Leverage funds:** \$0
- » **Project lead:** GRID Alternatives

Lifetime Benefits*

- » **GHG emissions reductions:** 2,304 MTCO₂e
- » **Energy cost savings:** \$3,085,061
- » **Renewable energy generation:** 7.7 gigawatt hours
- » **Direct jobs from TCC dollars:** 6.9 FTE
- » **Indirect jobs from TCC dollars:** 2.7 FTE
- » **Induced jobs from TCC dollars:** 4.8 FTE

Cumulative Progress Through FY 2022-2023

- » 465 residents attending outreach events and meetings to learn more about Solar Watts
- » 116 number of site visits completed
- » 88 kW of installed solar photovoltaic capacity
- » 29 solar photovoltaic systems installed in single-family homes

Responses to COVID-19

- » Focused outreach on mailers and online ads

*Estimated benefits were based on original anticipated project outcomes from 48 single-family and small multi-family homes..

Energy Efficiency

The **Energy Efficiency** project plans to retrofit installation in 180 homes within the project area. Energy efficiency upgrades may include but are not limited to: low-flow faucets, low-flow shower heads, LED lighting, LED night lights, Tier 2 power strips, vacancy/motion sensors, ceiling fans, HVAC system replacements (windows only), refrigerator replacements, smart thermostats, water heater blankets, and/or water heater replacements.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** December 2024
- » **Project lifetime:** 15 years
- » **TCC grant funds \$1,802,955**
- » **Leverage funds \$0**
- » **Project lead:** Habitat for Humanity

Lifetime Benefits*

- » **GHG emissions reductions 1,994 MTCO₂e**
- » **Energy cost savings \$517,204**
- » **Direct jobs from TCC dollars: 9.4 FTE**
- » **Indirect jobs from TCC dollars: 3.7 FTE**
- » **Induced jobs from TCC dollars: 6.6 FTE**

Cumulative Progress Through FY 2022-2023

- » 1,624 appliances have been upgraded to energy efficiency measures such as water heater replacements, low-flow showerheads and faucets, and ceiling fans
- » 239 residents attended outreach events and meetings to learn more about the energy efficiency program
- » 37 single-family homes have been retrofitted

Responses to COVID-19

- » Focused outreach on mailers and online ads

* Estimated benefits were based on original anticipated project outcomes from 289-300 homes.

Urban Community Forestry Projects



Installation of an urban minifarm at a Watts resident’s home. Photo credit: MudTown Farms Instagram

THE FOUR WATTS RISING URBAN COMMUNITY FORESTRY projects are planting 1,450 trees, which provide shade and cooling benefits. They are also planting edible landscaping that will improve the availability of local fresh produce to Watts residents. As the trees mature, they will sequester carbon. Their shading benefits should reduce the demand for electricity for cooling purposes. The additional tree coverage will also reduce the urban heat island effect on hot days and absorb stormwater on rainy days. These projects also include local training in tree care and maintenance, with a particular focus on local youth. These projects are led by the Los Angeles Cleantech Incubator, North East Trees, TreePeople, and the Watts Labor Community Action Committee.

Recent Accomplishments*

- » Watts Yardners created 18 urban mini farms in residents’ yards
- » Camp Ubuntu, a summer program at Markham Middle School, prepared students for planting in the garden
- » North East Trees completed the first year of care for 1,000 trees planted in Watts via 12 tree care events where 69 volunteers were trained in tree care practices

** Includes only accomplishments during the last FY (July 2022 through June 2023)*

Greening Public Housing

The **Greening Public Housing** project planted 200 trees at three HACLA Public Housing Properties to increase the tree canopy. Local youth were hired as a part of the project and participated in tree planting and maintenance. The youth team taught resident volunteers how to plant and care for the trees planted in their community. Events associated with the project included community meetings, workshops, and a planting day.

Project Details

- » **Launch date:** April 2019
- » **Completion date:** March 2025
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$275,475
- » **Leverage funds:** \$64,500
- » **Project lead:** North East Trees

Lifetime Benefits

- » **GHG emissions reductions:** 421 MTCO₂e
- » **Trees planted:** 200
- » **Direct jobs from TCC dollars:** 2.9 FTE
- » **Indirect jobs from TCC dollars:** 0.6 FTE
- » **Induced jobs from TCC dollars:** 1.0 FTE

Cumulative Progress Through FY 2022-2023

- » 200 trees planted in May 2023 at Gonzaque Village, Imperial Courts, and Nickerson Gardens

Responses to COVID-19

- » North East Trees assisted the Residential Advisory Committees, located at HACLA's public housing, with food distributions.
- » Adjusted outreach plans to conduct one-on-one discussions using COVID-19 safety protocols instead of group workshops on tree care and maintenance

Greening Watts

The **Greening Watts** project resulted in a total of 1,000 trees planted throughout the Watts project area. This included 500 trees planted along streets by North East Trees and 500 street trees planted by TreePeople. North East Trees worked with the City of Los Angeles and Watts residents through community planning meetings to determine locations to plant trees. An additional 800 trees was distributed to local residents, who learned how to care for their tree at Tree Care workshops (500 trees by North East Trees and 300 by TreePeople).

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** March 2025
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$1,055,918
- » **Leverage funds:** \$91,575
- » **Project lead:** North East Trees and TreePeople

Lifetime Benefits

- » **GHG emissions reductions:** 3,778 MTCO₂e
- » **Trees planted:** 1,000
- » **Direct jobs from TCC dollars:** 11.7 FTE
- » **Indirect jobs from TCC dollars:** 2.1 FTE
- » **Induced jobs from TCC dollars:** 4 FTE

Cumulative Progress Through FY 2022-2023

- » TreePeople and North East Trees have planted over 1,500 trees in Watts
- » TreePeople dispersed over 700 fruit trees to residents at various Watts community events
- » TreePeople held 26 tree care events
- » North East Trees held 5 tree care events
- » North East Trees has hired 4 local youth to help plant and maintain trees

Responses to COVID-19

- » Greening Watts partners distributed trees by putting them in trucks and distributing them directly to residents.
- » Adjusted outreach plans to conduct one-on-one discussions using COVID-19 safety protocols instead of group workshops on tree care and maintenance

Watts Community Tech Garden

The Watts Community Tech Garden is expanding the existing garden at Edwin Markham Middle School and adding water and energy efficient technologies. The infrastructure improvements are led by the Los Angeles Cleantech Incubator (LACI), and the Watts Labor Community Action Committee (WLCAC) leads the programming at the garden. Middle school students can take course electives that use the garden as an educational laboratory. Middle and high school students volunteer in the garden, and multiple high school students are part of a Community Healing Gardens (project lead before 2020) paid internship training program. The garden’s frequent community events, like the Annual Community Harvest Festival and Community Gardening Days, provide an opportunity for community members to take home organic produce as well as plant seeds for the upcoming season. The garden also offers community tours, which include culinary workshops and lessons on urban community gardening. Additionally, 150 fruit trees will be given away to Watts residents at the community volunteer events.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** June 2024
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$364,000
- » **Leverage funds:** \$0
- » **Project lead:** Los Angeles Cleantech Incubator

Lifetime Benefits

- » **GHG emissions reductions:** 210 MTCO₂e
- » **Trees planted:** 100
- » **Direct jobs from TCC dollars:** 2.4 FTE
- » **Indirect jobs from TCC dollars:** 0.8 FTE
- » **Induced jobs from TCC dollars:** 1.7 FTE

Cumulative Progress Through FY 2022-2023

- » 10,890 square feet of garden planted since 2019
- » 33 classes taught by WLCAC to 36 students to prepare for planting at the garden
- » 20 fruit trees distributed to horticulture students at Markham Middle School
- » 18 distribution days held at the garden with over 10,000 pounds of food distributed in 2020

Responses to COVID-19

- » The Watts Community Tech Garden distributed food grown in its garden to alleviate pandemic-exacerbated food insecurity in the community.

Watts Yardners

To further add to the supply of local fresh food, the **Watts Yardners Program** is creating 50 urban minifarms in residents' yards. Led by the Watts Labor Community Action Committee, these farms will include 150 fruit trees and raised edible gardens with a variety of edible plants. Participants are being recruited for a Watts Growers Training Program. Informational workshops are also being provided for those interested in learning about urban sustainability and green infrastructure.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** March 2025
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$523,549
- » **Leverage funds:** \$50,000
- » **Project Lead:** Watts Labor Community Action Committee

Lifetime Benefits

- » **GHG emissions reductions:** 316 MTCO_{2e}
- » **Trees planted:** 150
- » **Direct jobs from TCC dollars:** 5.2 FTE
- » **Indirect jobs from TCC dollars:** 1 FTE
- » **Induced jobs from TCC dollars:** 1.9 FTE

Cumulative Progress Through FY 2022-2023

- » 18 urban mini farms were installed at Watt residents' yards.
- » 6 Youth Yardners have been trained to maintain farm grounds and help install the urban mini farms.
- » 3 rounds of the Growers Certification program, an educational program teaching residents about urban gardening, were conducted with 4 participants completing the program.

Responses to COVID-19

- » Classes were suspended due to COVID-19.

Urban Greening Projects



Watts Cool Schools Compton Avenue Elementary Tree Planting Event on August 2023. Photo credit: TreePeople

THE URBAN GREENING PROJECTS IN WATTS resulted in the planting of plants and 475 trees, the creation of parks, and pedestrian and bicycle improvements throughout the site area. As the trees mature, they sequester carbon and shade nearby buildings, which should reduce the demand for electricity for cooling purposes. The additional tree coverage also reduce the urban heat island effect on hot days and absorb stormwater on rainy days. Bicycle and pedestrian improvements aim to reduce car travel by improving alternative mobility options. For these projects, leads include: Los Angeles Department of Transportation, WeCare Outreach, Urban Peace Institute, Los Angeles Unified School District, TreePeople, and Housing Authority of Los Angeles. Project leads will be responsible for tree maintenance and care during the grant term. After the grant term, the City of Los Angeles Bureau of Street Services will assume maintenance responsibilities.

Recent Accomplishments*

- » LADOT completed construction and upgrades to access ramps for WalkBike Watts
- » 787 fruit trees distributed to Watts residents at seven events
- » 55 trees planted at two elementary schools for the Watts Cool Schools project
- » 12 artists seeking to design wayfinding signage along the Cultural Trail

** Includes only accomplishments during the last FY (July 2022 through June 2023)*

Century Gateway Park

Century Gateway Park will develop a 0.6-acre park near the intersection of East Century Boulevard and Grape Streets. The park will have 35 trees and local and drought-tolerant plants. It will host community meetings to solicit resident input on how to prioritize park components and uses, as well as to keep the community updated on park plans and progress.

Project Details

- » **Launch date:** June 2022
- » **Anticipated completion date:** December 2024
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$428,575
- » **Leverage funds:** \$260,683
- » **Project lead:** The Michaels Organization

Lifetime Benefits

- » **GHG emissions reductions:** 69 MTCO₂e
- » **Energy cost savings:** \$1,185
- » **Trees planted:** 35
- » **Direct jobs from TCC dollars:** TBD FTE
- » **Indirect jobs from TCC dollars:** TBD FTE
- » **Induced jobs from TCC dollars:** TBD FTE

Cumulative Progress Through FY 2022-2023

- » Project implementation pending

Freedom Tree Park

Freedom Tree Park will develop a 1-acre park across from the Century Gateway Park with 35 trees and 100 other plants. It will host community meetings to solicit resident input on how to prioritize park components and uses, as well as keep the community updated on park plans and progress.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** December 2024
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$1,157,900
- » **Leverage funds:** \$0
- » **Project lead:** Housing Authority of the County of Los Angeles

Lifetime Benefits

- » **GHG emissions reductions:** 69 MTCO₂e
- » **Energy cost savings:** \$1,184
- » **Trees planted:** 35
- » **Direct Jobs from TCC dollars:** 8.1 FTE
- » **Indirect Jobs from TCC dollars:** 1.9 FTE
- » **Induced Jobs from TCC dollars:** 5.3 FTE

Cumulative Progress Through FY 2022-2023

- » Project implementation pending

Greening the A Line

The **Greening the A Line** (formerly known as the LA Metro Blue Line) project planted 200 trees in the first and last mile radius of the 103rd Street/Watts Towers Station of the A Line. The project has trained 235 community members on tree planting and 95 community members on tree care.

Project Details

- » **Launch Date:** April 2019
- » **Anticipated Completion Date:** March 2025
- » **Project lifetime:** 40 years
- » **TCC Grant Funds:** \$305,179
- » **Leverage Funds:** \$0
- » **Project Lead:** TreePeople

Lifetime Benefits

- » **GHG emissions reductions:** 393 MTCO₂e
- » **Energy Cost Savings:** \$6,770
- » **Trees planted:** 200
- » **Direct Jobs from TCC dollars:** 2.9 FTE
- » **Indirect Jobs from TCC dollars:** 0.7 FTE
- » **Induced Jobs from TCC dollars:** 1.2 FTE

Cumulative Progress Through FY 2022-2023

- » 235 community members were trained on tree planting.
- » 200 trees planted within the first and last mile radius, completing TreePeople’s tree planting
- » 92 community members were trained on tree care.
- » 15 tree planting events held
- » 14 tree care and maintenance events held

WalkBike Watts

The Los Angeles Department of Transportation and the City of Los Angeles Department of Cultural Affairs are leading the **WalkBike Watts** project, which involves pedestrian and bicyclist improvements, the development of a cultural trail, and the establishment of a Safe Passage Program for schools. The pedestrian and bicyclist improvements include the construction of 3.8 miles of bicycle sharrows and 1.4 miles of buffered bicycle lines, as well as the installation of nine crossing beacons, four new signals and one signal modification, five leading pedestrian intervals, eight curb extensions, bus pads and ADA landings, two curb ramps. The cultural trail, which is dedicated to highlighting Watts’ rich history, art and culture, will include way-finding signage, will be designed and implemented through a community engagement process, with a goal of soliciting input and design from the local artist community. The Urban Peace Institute and We Care Outreach will lead the creation of the Safe Passage Program, which will create safer routes for students from 112th Street, Flournoy, and Florence Griffith Joyner elementary schools, and Markham Middle School. Local adults will be trained to help ensure the safety of students as they commute to and from school each day along the identified passages.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** September 2025
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$3,511,260
- » **Leverage funds:** \$1,013,110
- » **Project lead:** Los Angeles Department of Transportation, Department of Cultural Affairs, Urban Peace Institute, and We Care Outreach

Lifetime Benefits*

- » **GHG emissions reductions:** 3,495 MTCO₂e
- » **Energy cost savings:** \$339
- » **Travel Cost Savings:** \$4,594,559
- » **VMT reductions:** 407,166
- » **Direct jobs from TCC dollars:** 16.4 FTE
- » **Indirect jobs from TCC dollars:** 7.1 FTE
- » **Induced jobs from TCC dollars:** 13 FTE

Cumulative Progress Through FY 2022-2023

- » Construction for two access ramps completed
- » Community engagement for bike lanes completed
- » Traffic signal installation is underway
- » 12 requests for proposals were received for artists to design public art and wayfinding signage along the trail
- » A committee of community members was developed to review proposals and vote on submissions
- » Average of 75 students utilized the Safe Passage Program to walk to and from school

Responses to COVID-19

- » The Urban Peace Institute, part of the WalkBike Watts project, moved its community engagement meetings online. It conducted safe passage training and provided COVID-19 information and resources to support parents and stakeholders.

* Estimated benefits were based on original anticipated project outcomes from 10 trees.

Watts Cool Schools - Green Schools

The **Watts Cool Schools - Green Schools** project is providing cooling benefits to four local elementary schools by painting playgrounds with a cool coat, installing 80,000 square feet of cool pavement, removing asphalt, and planting 112 trees. The project is facilitating the engagement and education of students on urban greening. At each school, the project partner will host a public presentation on the project and a community sustainability workshop.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** March 2025
- » **Project lifetime:** 40 years
- » **TCC grant funds:** \$621,861
- » **Leverage funds:** \$13,755
- » **Project lead:** Los Angeles Unified School District; TreePeople

Lifetime Benefits

- » **GHG emissions reductions:** 220 MTCO₂e
- » **Energy cost savings:** \$3,791
- » **Trees planted:** 112
- » **Direct jobs from TCC dollars:** 4.3 FTE
- » **Indirect jobs from TCC dollars:** 1.1 FTE
- » **Induced jobs from TCC dollars:** 2.8 FTE

Cumulative Progress Through FY 2022-2023

- » Green Team volunteers lead and recruit for planting and care events
- » 320 total volunteers attended all four tree planting events
- » 80 Green Team volunteers recruited to learn about tree care and maintenance
- » 55 trees planted at two schools for the 2022-2023 fiscal year

Responses to COVID-19

- » School closures during the COVID-19 pandemic delayed the ability to work on school sites or with students.

Weigand Elementary Urban Trees/Rain Garden

The **Weigand Elementary Urban Trees/Rain Gardens** project is planting of 450 native plants and 43 trees, and installing 2,400 square feet of pervious rain gardens near Weigand Elementary School. It is coordinating regular community engagement events to recruit and educate the public. And it is hosting community tree care meetings to educate attendees about the project and to recruit tree adopters, who will be responsible for tree watering during the grant period. Additional tree adopters will be recruited via phone, bilingual flyers, and door-to-door canvassing.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** December 2024
- » **Project lifetime:** 20 years
- » **TCC grant funds:** \$124,439
- » **Leverage funds:** \$10,038
- » **Project lead:** TreePeople

Lifetime Benefits

- » **GHG emissions reductions:** 84 MTCO₂e
- » **Energy cost savings:** \$1,456
- » **Trees planted:** 43
- » **Direct jobs from TCC dollars:** 0.9 FTE
- » **Indirect jobs from TCC dollars:** 0.2 FTE
- » **Induced jobs from TCC dollars:** 0.5 FTE

Cumulative Progress Through FY 2022-2023

- » 787 fruit trees distributed to Watts residents.
- » 47 trees planted around Weigand Elementary as of December 2023.
- » 7 community events held to distribute trees to residents.

Responses to COVID-19

- » Weigand Elementary Urban Trees/Rain Gardens conducted two lessons for Jordan High School students remotely for Love community bike ride in March 2021.

Wilmington Avenue Great Streets

On a half-mile stretch of Wilmington Avenue, 3,750 square feet of plants (non-trees) will be planted, and two landscaped bump outs will be installed to improve pedestrian areas as part of the **Wilmington Avenue Great Streets** project. The project also includes pedestrian and bicycle mobility improvements and an estimated 0.4-acre feet of stormwater will be captured and treated and 0.2 acres of green/open space restored.

Project Details

- » **Launch date:** April 2019
- » **Anticipated completion date:** TBD
- » **Project lifetime:** 20 years
- » **TCC grant funds:** \$868,000
- » **Leverage funds:** \$0
- » **Project lead:** Streets LA

Lifetime Benefits

- » **GHG emissions reductions:** 268 MTCO₂e
- » **Energy cost savings:** \$1,354
- » **Travel cost savings:** \$320,760
- » **VMT reductions:** 27,700
- » **Trees planted:** 40
- » **Direct jobs from TCC dollars:** 6.1 FTE
- » **Indirect jobs from TCC dollars:** 1.5 FTE
- » **Induced jobs from TCC dollars:** 4 FTE

Cumulative Progress Through FY 2022-2023

- » In June 2023, HACLA received a RAISE grant from the US Department of Transportation to fund the scope of work for the project.



Watts Rising's Earth Day Event on April 2023. Photo credit: Watts Rising Collaborative

IN ADDITION TO THE 17 WATTS RISING PROJECTS that received TCC funding, the Housing Authority of the City of Los Angeles included six leveraged projects as part of its Watts Rising package. These leveraged projects are independently funded and help further the objectives of TCC. In Watts, these projects include: (1) 103rd Street Streetscape (2) 103rd St Urban Trees/Rain Garden, (3) Central Avenue Streetscape, (4) Century Boulevard Complete Streets, (5) Jordan Downs Phase 1B, and (6) Jordan Downs Retail Center. These projects include the planting of trees and vegetation, pedestrian improvements, and the construction of more affordable housing units and a grocery store. One project which was originally proposed, Success Avenue Green Streets, lost funding at the beginning of implementation and therefore, is no longer included in the suite of Watts Rising projects.

The TCC grant allows the Housing Authority of the City of Los Angeles to augment its existing efforts by funding more affordable housing, safer biking and walking infrastructure, and reducing water waste. The following section provides an overview of the leveraged projects underway in Watts.

103rd Street Streetscape



Rendering of 103rd Street Streetscape improvements. Photo credit: LA County Department of Public Works

THE CITY OF LOS ANGELES Bureau of Street Services is installing pedestrian lighting and American with disabilities Act-compliant ramps; replacing curbs, gutters, and sidewalks; and planting 50 trees on a 0.4-mile stretch of 103rd Street. Pedestrian improvements promote alternatives to driving cars, and trees will sequester carbon and provide cooling benefits as they mature.

103rd Street Streetscape

Project Details

- » **Launch date:** NA
- » **Completion date:** May 2020
- » **Project lead:** City of Los Angeles
Bureau of Street Services
- » **TCC grant funds:** \$0
- » **Leveraged funds:** \$836,700

Cumulative Progress Through FY 2022-2023

- » Project completed in 2020

103rd Street Urban Trees/Rain Garden



Heart of Watts Community Garden Opening Event. Photo credit: From Lot to Spot

FROM LOT TO SPOT will plant 600 native plants and 50 native trees, as well as install 2,800 square feet of pervious rain gardens. Associated events will include two community tree care meetings and a planting day. This project will also design related lesson plans for Jordan High School students. Trees and plants sequester carbon, while the additional vegetative coverage reduces the urban heat island effect on hot days and absorbs stormwater on rainy days.

103rd Street Urban Trees/Rain Garden

Project Details

- » **Launch date:** TBD
- » **Completion date:** June 2024
- » **Project lead:** TreePeople
- » **TCC grant funds:** \$0
- » **Leveraged funds:** \$104,166

Cumulative Progress Through FY 2022-2023

- » Implementation pending

Central Avenue Streetscape



Rendering for Central Avenue Streetscape improvements. East Side of Central Avenue. Photo credit: Watts Neighborhood Council

THE CITY OF LOS ANGELES Bureau of Street Services and Grant Housing and Economic Development Corporation are collaborating to make transit and pedestrian improvements along a quarter mile of Central Avenue between 103rd Street and the Imperial Highway and along a quarter mile between 108th and 104th Streets. Pedestrian improvements include the construction and installation of three median islands, six bumpouts, three signal modifications, four roadway lights, five bus pads, 12 accessible gutter ramps, and the planting of 81 trees. The bicycle and pedestrian improvements aim to reduce car travel by improving alternative mobility options. This project will also include the replacement of 58,000 square feet of sidewalk and 2,500 square feet of curbs and gutters, as well as the addition of tree wells, rain gardens, and permeable pavement. These changes will help to reduce the urban heat island effect and improve stormwater capture.

Central Avenue Streetscape

Project Details

- » **Launch date:** TBD
- » **Completion date:** June 2024
- » **Project lead:** City of Los Angeles Bureau of Street Services; Grant Housing and Economic Development Corporation
- » **TCC grant funds:** \$0
- » **Leveraged funds:** \$4,127,890

Cumulative Progress Through FY 2022-2023

- » Implementation pending

Century Boulevard Complete Street



Grand Opening Day after Century Boulevard improvements were completed. Photo credit: Mayor Eric Garcetti, @MayorOfLA

THE CITY OF LOS ANGELES Bureau of Street Services and Bureau of Engineering constructed a half-mile of “complete street” on Century Boulevard. According to the City of Los Angeles Complete Street Design Guide, the aim of a complete street is “to ensure that the safety, accessibility, and convenience of all transportation users — pedestrians, bicyclists, transit riders, and motorists — is accommodated.” The improvements for this project included the installation of street lights, signals, sidewalks, and parkways, and 155 new trees. These pedestrian and bicyclist improvements promote alternative mobility options to cars. The planted trees sequester carbon, reduce the urban heat island effect, and absorb stormwater on rainy days.

Century Boulevard Complete Street

Project Details

- » **Launch date:** NA
- » **Completion date:** August 2018
- » **Project lead:** City of Los Angeles Bureau of Street Services
- » **TCC grant funds:** \$0
- » **Leveraged funds:** \$10,689,780

Cumulative Progress Through FY 2022-2023

- » Project completed in August 2018

Jordan Downs Phase 1B



New Harvest at Jordan Downs Phase 1B. Photo credit: Housing Authority of the City of Los Angeles

THE MICHAELS DEVELOPMENT CO. led the construction of 135 affordable multi-family housing units on Century Boulevard. This project increases the density of the neighborhood, which should result in a reduction in the vehicle miles traveled, along with lower housing costs for Watts residents. The 300 trees planted will sequester carbon and shade nearby buildings, which should reduce the demand for electricity for cooling purposes, reduce the urban heat island effect, and absorb stormwater.

Jordan Downs Phase 1B

Project Details

- » **Launch date:** May 2018
- » **Completion date:** May 2022
- » **Project lead:** The Michaels Organization
- » **TCC grant funds:** \$0
- » **Leveraged funds:** \$67,682,777

Cumulative Progress Through FY 2022-2023

- » Project completed in May 2022

Jordan Downs Retail Center



Jordan Downs Phase 1B Retail Center, known as Freedom Plaza. Photo credit: Freedom Plaza Watts.

PRIMESTOR DEVELOPMENT INC. constructed a 31,299-square-foot grocery store, including the planting of 80 trees, located at Freedom Plaza (formerly known as Jordan Downs Retail Center). This increases the density of the neighborhood and accessibility of local shopping options and jobs, which aim to reduce vehicle miles traveled. Furthermore, the additional trees will sequester carbon and provide cooling benefits.

Jordan Downs Retail Center

Project Details

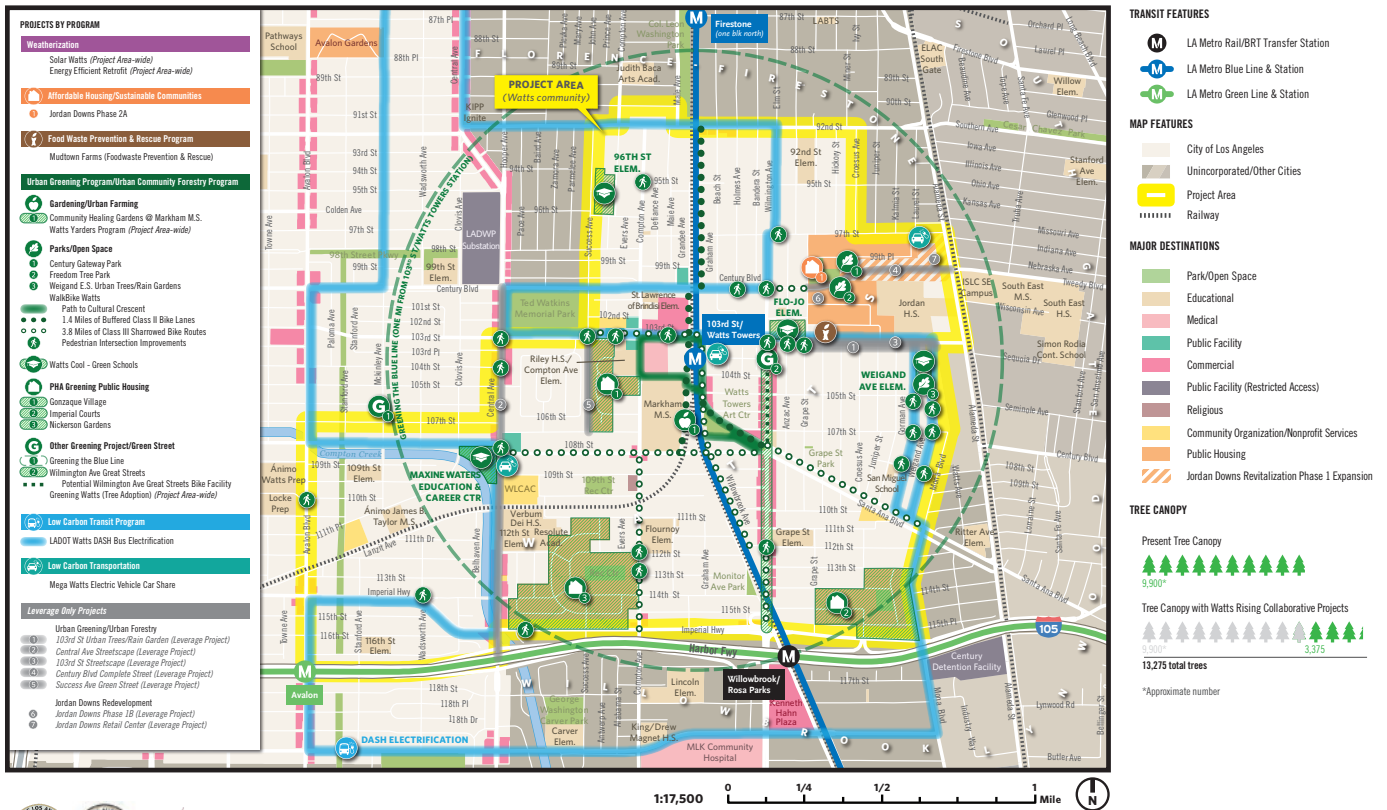
- » **Launch date:** TBD
- » **Completion date:** October 2020
- » **Project lead:** Primestor Development Inc.
- » **TCC grant funds:** \$0
- » **Leveraged funds:** \$44,314,118

Cumulative Progress Through FY 2022-2023

- » Project completed in 2020

APPENDICES

Appendix 1: Supplemental Maps



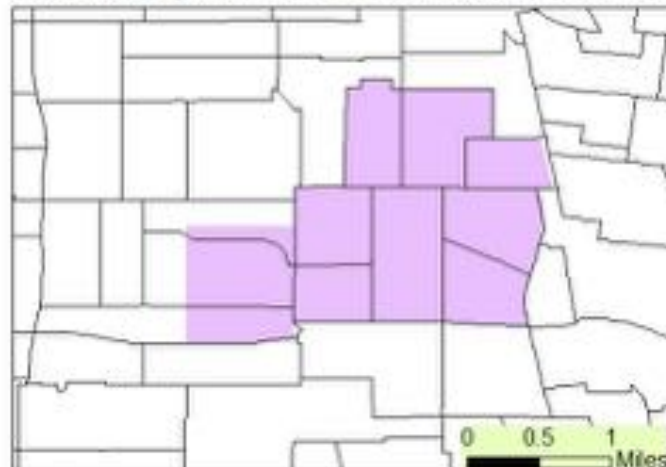
Detailed project map of Watts Rising project locations at the time of proposal. Some project plans have since been modified. Photo credit: Watts Rising Collaborative

Watts TCC Project Area Overlay Maps

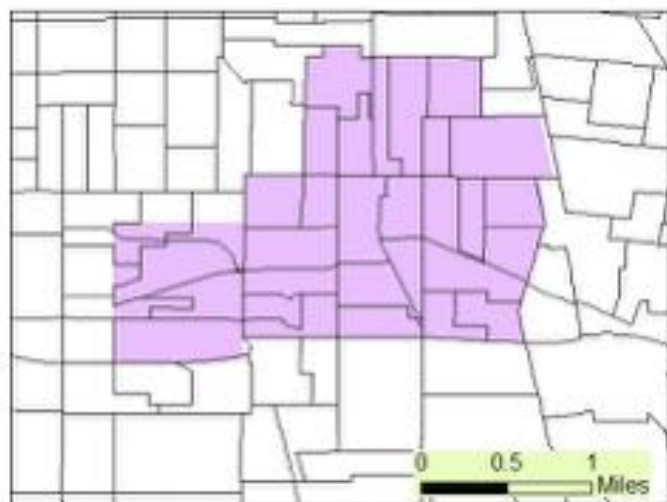
(#) = number of geographic units that intersect with TCC project area (excluding units with less than 2% of total area under TCC project area)
 Census tract, block group, and zip code maps from US Census Bureau (2016)



Watts TCC Project Area



Census Tracts (12)



Census Block Groups (36)



Zip Code Tabulation Areas (2)

Maps depicting the scale of the TCC project area. Photo credit: UCLA Luskin Center for Innovation

Appendix 2: Summary of Methods for Estimating Project Benefits

Benefit	Methodology	Version	Revision Date
Avoided stormwater runoff	iTree Planting	1.2.0	N/A
Energy cost savings	California Air Resources Board (CARB) Co-benefit Assessment Methodology for Energy and Fuel Cost Savings*	N/A	9/13/2019
Greenhouse gas (GHG) reductions	CARB Quantification Methodology (QM): Affordable Housing and Sustainable Communities Program	FY 2016-17	10/2/2017
	CARB QM: Low-Carbon Transportation Program	FY 2016-17	4/4/2017
	CARB QM: Low-Income Weatherization Program	FY 2016-17	N/A
	CARB QM: Transit and Intercity Rail Capital Program	FY 2016-17	N/A
	CARB QM: Urban and Community Forestry Program	FY 2016-17	12/8/2016
	CARB QM: Urban Greening Grant Program	FY 2016-17	N/A
	CARB QM: Waste Diversion Grant and Loan Program	FY 2015-16/ FY 2016-17	N/A
Jobs	CARB Job Co-benefit Assessment Methodology	N/A	4/29/2019
Renewable energy generation	CARB QM: Low-Income Weatherization Program	FY 2015-16	11/14/2016
Travel cost savings	CARB Co-benefit Assessment Methodology for Travel Cost Savings**	N/A	10/18/2019
Vehicle miles traveled (VMT) reductions	CARB QM: Affordable Housing and Sustainable Communities Program	FY 2016-17	10/2/2017
	CARB QM: Low-Income Weatherization Program	FY 2016-17	N/A
	CARB QM: Urban Greening Grant Program	FY 2016-17	N/A

* CARB’s energy and fuel cost-savings methodology does not provide an explicit example of how to calculate cost savings from urban forestry and greening projects. Nonetheless, CARB’s methodology does provide a basic framework for estimating cost savings from any project that achieves energy use reductions: (energy cost savings = net decline in energy use X per unit cost of energy). Thus, for urban forestry and urban greening projects, the UCLA-UCB evaluation team estimated energy cost savings by taking two outputs from iTree (annual electricity savings and annual natural gas savings) and multiplying these outputs by their per unit cost (as based on cost assumptions from Appendix A of CARB’s energy cost-savings methodology). The evaluation team then scaled up these costs by 40 years and prorated them according to the percentage of trees that actually shade buildings (and therefore have a meaningful impact on electricity and gas use).

** To calculate travel cost savings, CARB’s travel cost-savings methodology relies on estimates about changes in transit ridership. For Affordable Housing and Sustainable Communities (AHSC) projects, subsequent changes in ridership are unknown, and CARB’s methodology does not provide a method for calculating travel cost savings in the face of that unknown. Thus, the UCLA-UCB evaluation team expanded upon CARB’s methodology by estimating travel cost savings from AHSC projects without ridership estimates. To do so, the evaluation team conservatively assumes the following: (1) VMT reductions associated with the AHSC projects are achieved by drivers who switch to the most expensive alternative mode (which between transit, biking, and walking would be transit); (2) all individuals in the apartment complex will take transit so often that they buy a monthly transit pass because that’s the most economical thing to do at high levels of transit ridership; and (3) that all individuals in the apartment complex buy a pass for the duration of the project lifetime (less the number of months for which they receive a free pass). The evaluation team estimated the number of individuals in the apartment complex by multiplying the number of units by the average household size for the TCC census tracts.

Appendix 3: Watts Rising Collaborative Structure

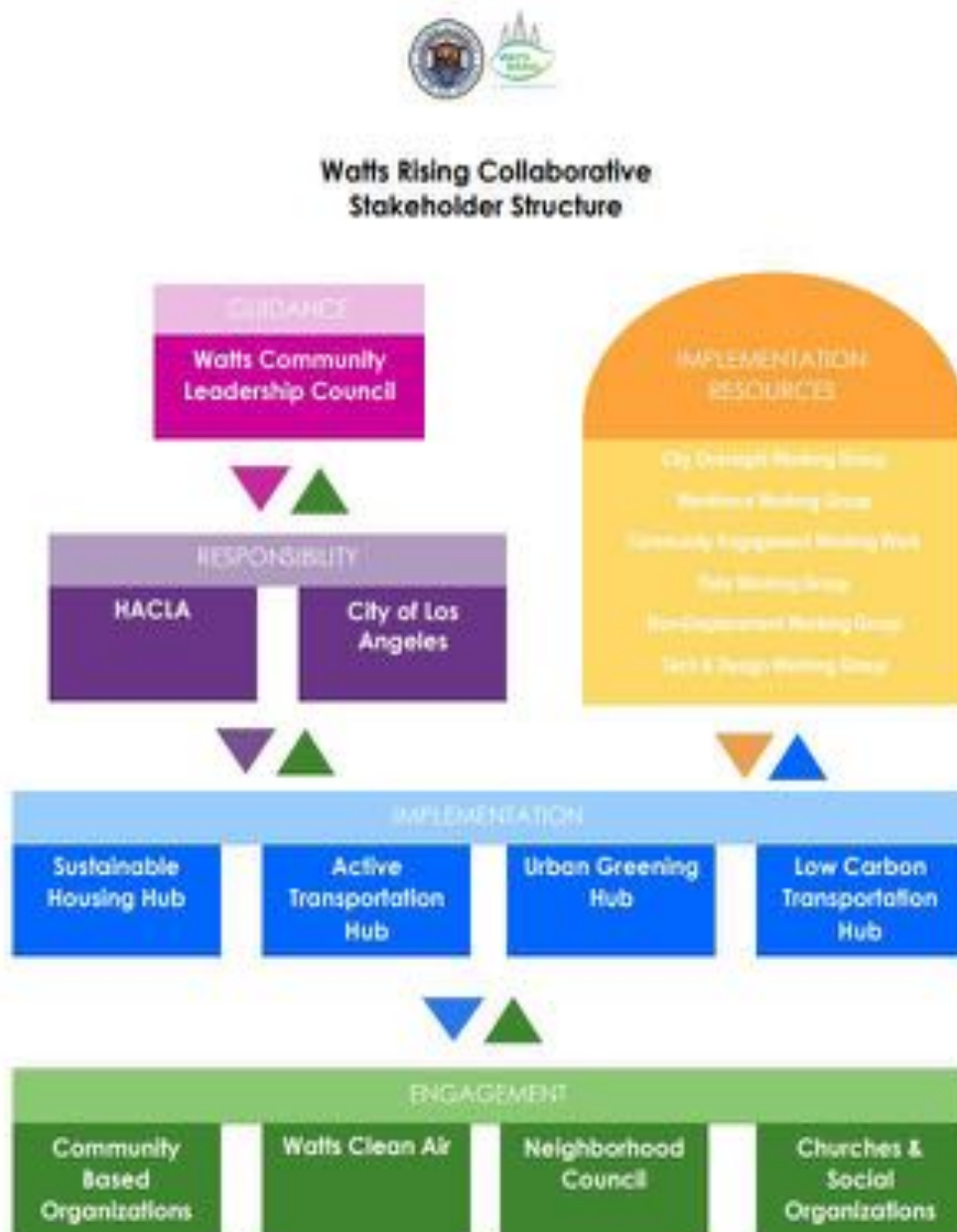


Diagram showing the Watts Rising Collaborative Structure. Photo credit: Housing Authority of Los Angeles and Watts Rising



Watts Rising Collaborative Project Implementation Hub Organization



Diagram showing the Watts Rising Hub Structure. Photo credit: Housing Authority of Los Angeles and Watts Rising

Appendix 4: Watts Rising Community Advisory Group

Name	Category
Jackie Badejo	Former Member
Elena Bravo*	Resident
Sandra Garcia*	Resident
Blanca Gonzalez*	Resident
Jorge Gonzalez*	Resident
Valery Holguin*	Resident
Fatima Iqbal-Zubair	Former Member
Janice Jackson*	Resident
Dana King*	Resident
Cristal Macias	Former Member
Adelina McCloud*	Resident
Juana Ortega*	Resident
CJ Scott*	Resident
Amada Valle*	Resident
Shiquita Wesson*	Resident

*As of January 2024, these are the most current members on the Community Advisory Group.

Appendix 5: Watts Rising Street Team Members

Name	Category
Mary Ann Cortez	Former Member
Perry Crouch	Former Member
Juana Escobedo*	Resident
Moses Massenburg	Former Member
Angelica Urquidez*	Resident
Anai Velazquez	Former Member
Kathryn Wooten	Former Member

*As of January 2024, these are the most current members on the Street Team.

Appendix 6: Watts Rising TCC Census Tracts

Census Tract GEOID Number	City	Population (ACS 2012-2016 estimate)	Area (sq. mi.)	Population Density (pop./ sq.mi.)	Overlap with TCC Project Area (%)
14000US06037241001	Los Angeles	4,580	0.35	13,086	44%
14000US06037240900	Los Angeles	5,745	0.41	13,901	68%
14000US06037240901*	Los Angeles	N/A	0.14	N/A	N/A
14000US06037240902*	Los Angeles	N/A	0.28	N/A	N/A
14000US06037242700	Los Angeles	5,969	0.39	15,228	100%
14000US06037242100	Los Angeles	2,911	0.18	16,404	95%
14000US06037242000	Los Angeles	4,159	0.25	16,656	100%
14000US06037240800	Los Angeles	4,625	0.25	18,762	31%
14000US06037242300	Los Angeles	4,577	0.24	18,815	100%
14000US06037242200	Los Angeles	6,366	0.31	20,274	100%
14000US06037242201*	Los Angeles	N/A	0.16	N/A	N/A
14000US06037242202*	Los Angeles	N/A	0.16	N/A	N/A
14000US06037243000	Los Angeles	7,147	0.28	25,804	99%
14000US06037243001*	Los Angeles	N/A	0.13	N/A	N/A
14000US06037243002*	Los Angeles	N/A	0.15	N/A	N/A
14000US06037242600	Los Angeles	4,980	0.18	27,097	100%
14000US06037243100	Los Angeles	6,459	0.23	27,559	100%

* As of 2020, the geographies of the 2020 decennial census have been redrawn from the 2010 decennial census. These boundary changes have impacted most of the census tracts at the site boundary level or the control tract level. Please see Appendix 4 and Appendix 5 to view a detailed list of what census tracts or control tracts have changed. For more information please visit the following: <https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2020/geography-changes.html>

Appendix 7: Watts Rising Control Census Tracts

Census Tract GEOID Number	City	Population (ACS 2012-2016 estimate)	Area (sq. mi.)	Population Density (pop./ sq.mi.)
14000US06037239601	Los Angeles	3,644	0.16	22,350
14000US06037219901	Los Angeles	4,444	0.20	21,928
14000US06037232120	Los Angeles	5,715	0.20	28,363
14000US06037221500	Los Angeles	4,011	0.15	27,286
14000US06037237720	Los Angeles	3,134	0.13	24,958
14000US06037238310	Los Angeles	4,927	0.15	32,138
14000US06037238320	Los Angeles	4,133	0.18	22,859
14000US06037237710	Los Angeles	3,281	0.17	19,658
14000US06037241120	Los Angeles	5,082	0.26	19,832
14000US06037231100	Los Angeles	3,516	0.35	10,185
14000US06037231210	Los Angeles	3,509	0.12	28,341
14000US06037231300	Los Angeles	5,142	0.25	20,257
14000US06037231301*	Los Angeles	N/A	0.09	N/A
14000US06037231302*	Los Angeles	N/A	0.16	N/A
14000US06037231600	Los Angeles	6,957	0.37	18,874
14000US06037231601*	Los Angeles	N/A	0.12	N/A
14000US06037231602*	Los Angeles	N/A	0.12	N/A
14000US06037231603*	Los Angeles	N/A	0.12	N/A
14000US06037231710	Los Angeles	4,081	0.13	32,644
14000US06037240500	Los Angeles	6,509	0.31	20,748
14000US06037237500	Los Angeles	2,716	0.13	20,853
14000US06037232500	Los Angeles	4,762	0.30	16,066
14000US06037232700	Los Angeles	5,968	0.28	21,139
14000US06037232701*	Los Angeles	N/A	0.11	N/A
14000US06037232702*	Los Angeles	N/A	0.18	N/A
14000US06037240600	Los Angeles	5,685	0.26	21,786
14000US06037237101	Los Angeles	3,653	0.24	15,043
14000US06037237202	Los Angeles	4,714	0.43	11,014
14000US06037237401	Los Angeles	3,737	0.20	18,753
14000US06037239202	Los Angeles	5,347	0.49	10,856
14000US06037239501	Los Angeles	3,599	0.18	19,657
14000US06037239602	Los Angeles	3,586	0.14	25,937
14000US06037239802	Los Angeles	5,102	0.24	21,682
14000US06037239801	Los Angeles	3,524	0.14	24,617
14000US06037228500	Los Angeles	4,581	0.17	26,431

Census Tract GeoID Number	City	Population (ACS 2012-2016 estimate)	Area (sq. mi.)	Population Density (pop./ sq.mi.)
14000US06037231720	Los Angeles	4,789	0.18	26,265
14000US06037237102	Los Angeles	3,239	0.18	18,238
14000US06037241400	Los Angeles	3,377	0.22	15,196
14000US06037240010	Los Angeles	3,625	0.23	15,955
14000US06037241202	Los Angeles	4,807	0.45	10,703
14000US06037240401	Los Angeles	5,562	0.27	20,786
14000US06037541604	Compton	6,391	0.32	19,839
14000US06037535102	Unincorporated	5,055	0.23	22,150
14000US06037540901	Unincorporated	4,565	0.45	10,160
14000US06037600304	Unincorporated	3,412	0.17	19,825

* As of 2020, the geographies of the 2020 decennial census have been redrawn from the 2010 decennial census. These boundary changes have impacted most of the census tracts at the site boundary level or the control tract level. Please see Appendix 4 and Appendix 5 to view a detailed list of what census tracts or control tracts have changed. For more information please visit the following: <https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2020/geography-changes.html>

Appendix 8: Indicator Data

Appendix 8.1: Demographics

Table A8.1.1: American Community Survey (ACS) Demographic Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Total Population (B01003)	2018-2022	55,743	2,881	180,024	4,822	9,936,690	0	39,356,104	0
	2017-2021	56,618	2,785	180,387	4,817	10,019,635	0	39,455,353	0
	2016-2020	56,968	2,950	180,897	5,141	10,040,682	0	39,346,023	0
	2015-2019	58,061	1,877	180,450	3,176	10,081,570	0	39,283,497	0
	2014-2018	57,757	1,884	178,719	2,976	10,098,052	0	39,148,760	0
	2013-2017	58,080	1,854	174,454	3,005	10,105,722	0	38,982,847	0
	2012-2016	57,518	1,882	169,881	2,981	10,057,155	0	38,654,206	0
	2011-2015	56,232	1,905	168,937	3,062	10,038,388	0	38,421,464	0
	2010-2014	55,008	1,854	164,136	3,143	9,974,203	0	38,066,920	0
	2009-2013	53,716	1,829	162,558	3,251	9,893,481	0	37,659,181	0
Percent Hispanic, all races (B03002)	2018-2022	76.8%	2.4%	76.2%	1.5%	48.7%	0.0%	39.7%	0.0%
	2017-2021	76.9%	2.2%	75.9%	1.4%	48.7%	0.0%	39.5%	0.0%
	2016-2020	74.4%	2.5%	74.8%	1.5%	48.3%	0.0%	39.1%	0.0%
	2015-2019	74.1%	2.0%	74.7%	1.2%	48.5%	0.0%	39.0%	0.0%
	2014-2018	73.6%	2.1%	74.1%	1.2%	48.5%	0.0%	38.9%	0.0%
	2013-2017	72.9%	2.2%	73.2%	1.2%	48.4%	0.0%	38.8%	0.0%
	2012-2016	71.6%	2.4%	72.9%	1.3%	48.3%	0.0%	38.6%	0.0%
	2011-2015	71.8%	2.4%	73.1%	1.4%	48.2%	0.0%	38.4%	0.0%
	2010-2014	71.0%	2.4%	72.7%	1.3%	48.1%	0.0%	38.2%	0.0%
2009-2013	71.3%	2.5%	71.8%	1.4%	47.9%	0.0%	37.9%	0.0%	

*Margins of Error (MOE) for the county and the state are obtained directly from the U.S. Census Bureau. MOEs for TCC and control census tracts are derived by the UCLA Luskin Center for Innovation (LCI) in accordance with the methods described by the U.S. Census Bureau in *Understanding and Using American Community Survey Data: What All Data Users Need to Know* (2018). All MOEs are reported at the 90% interval.

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent White, non-Hispanic (B03002)	2018-2022	0.8%	0.3%	2.1%	0.4%	25.2%	0.0%	35.2%	0.0%
	2017-2021	0.7%	0.3%	1.6%	0.3%	25.5%	0.0%	35.8%	0.0%
	2016-2020	0.7%	0.3%	1.6%	0.3%	25.9%	0.0%	36.5%	0.0%
	2015-2019	0.8%	0.3%	1.6%	0.2%	26.2%	0.0%	37.2%	0.0%
	2014-2018	0.8%	0.4%	1.2%	0.2%	26.5%	0.0%	37.9%	0.0%
	2013-2017	0.8%	0.4%	1.2%	0.2%	26.7%	0.0%	38.4%	0.0%
	2012-2016	0.7%	0.4%	1.1%	0.2%	26.9%	0.0%	38.7%	0.0%
	2011-2015	0.7%	0.4%	0.9%	0.2%	27.2%	0.0%	39.2%	0.0%
	2010-2014	0.7%	0.3%	1.1%	0.2%	27.5%	0.0%	39.7%	0.0%
2009-2013	0.7%	0.3%	1.1%	0.2%	27.5%	0.0%	39.7%	0.0%	
Percent all communities of color, non-Hispanic: Black, Asian, Pacific Islander, American Indian, other, and two or more races (B03002)	2018-2022	22.4%	2.4%	21.7%	1.3%	26.1%	0.1%	25.1%	0.1%
	2017-2021	22.4%	2.4%	22.5%	1.3%	25.9%	0.1%	24.7%	0.1%
	2016-2020	25.0%	2.9%	23.6%	1.3%	25.8%	0.1%	24.4%	0.1%
	2015-2019	25.1%	1.8%	23.7%	1.0%	25.3%	0.1%	23.8%	0.0%
	2014-2018	25.5%	2.0%	24.5%	1.0%	25.2%	0.1%	23.6%	0.0%
	2013-2017	26.4%	2.0%	25.6%	1.0%	25.1%	0.1%	23.3%	0.0%
	2012-2016	27.6%	1.8%	25.9%	1.0%	24.9%	0.1%	23.1%	0.0%
	2011-2015	27.5%	1.8%	25.8%	1.0%	24.8%	0.1%	22.9%	0.0%
	2010-2014	28.3%	1.7%	26.4%	1.0%	24.7%	0.1%	22.7%	0.0%
2009-2013	28.0%	1.8%	27.0%	1.0%	24.6%	0.1%	22.4%	0.0%	
Percent other communities of color, non-Hispanic: Pacific Islander, American Indian, other, two or more races	2018-2022	1.3%	0.5%	1.8%	0.4%	3.9%	0.1%	4.9%	0.0%
	2017-2021	1.3%	0.6%	1.6%	0.4%	3.7%	0.1%	4.6%	0.0%
	2016-2020	1.4%	0.6%	1.7%	0.5%	3.4%	0.1%	4.4%	0.0%
	2015-2019	1.7%	0.9%	1.2%	0.2%	3.0%	0.1%	4.0%	0.0%
	2014-2018	1.4%	0.8%	1.2%	0.2%	3.0%	0.0%	3.9%	0.0%
	2013-2017	1.1%	0.6%	1.2%	0.3%	2.9%	0.0%	3.9%	0.0%
	2012-2016	1.2%	0.7%	1.2%	0.2%	2.9%	0.0%	3.8%	0.0%
	2011-2015	0.9%	0.6%	1.1%	0.2%	2.9%	0.1%	3.7%	0.0%
	2010-2014	0.7%	0.5%	1.0%	0.3%	2.8%	0.1%	3.7%	0.0%
2009-2013	0.8%	0.6%	1.0%	0.3%	2.7%	0.0%	3.6%	0.0%	

Table continues on next page

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent Black, non-Hispanic (B03002)	2018-2022	20.2%	2.3%	19.0%	1.2%	7.6%	0.0%	5.3%	0.0%
	2017-2021	20.2%	2.3%	20.0%	1.3%	7.6%	0.0%	5.4%	0.0%
	2016-2020	22.3%	2.7%	21.1%	1.2%	7.8%	0.0%	5.4%	0.0%
	2015-2019	22.7%	1.5%	21.6%	0.9%	7.8%	0.0%	5.5%	0.0%
	2014-2018	23.6%	1.8%	22.6%	0.9%	7.9%	0.0%	5.5%	0.0%
	2013-2017	24.6%	1.9%	23.8%	1.0%	7.9%	0.0%	5.5%	0.0%
	2012-2016	25.8%	1.7%	24.2%	1.0%	8.0%	0.0%	5.6%	0.0%
	2011-2015	26.3%	1.7%	24.2%	1.0%	8.0%	0.0%	5.6%	0.0%
	2010-2014	27.4%	1.7%	24.9%	0.9%	8.0%	0.0%	5.7%	0.0%
2009-2013	26.9%	1.7%	25.4%	1.0%	8.1%	0.0%	5.7%	0.0%	
Percent Asian, non-Hispanic (B03002)	2018-2022	0.9%	0.6%	1.0%	0.3%	14.6%	0.0%	14.9%	0.0%
	2017-2021	0.9%	0.6%	0.9%	0.2%	14.6%	0.0%	14.7%	0.0%
	2016-2020	1.2%	0.8%	0.8%	0.2%	14.6%	0.0%	14.6%	0.0%
	2015-2019	0.7%	0.6%	0.8%	0.2%	14.4%	0.0%	14.3%	0.0%
	2014-2018	0.5%	0.3%	0.7%	0.2%	14.4%	0.0%	14.1%	0.0%
	2013-2017	0.6%	0.4%	0.6%	0.2%	14.3%	0.0%	13.9%	0.0%
	2012-2016	0.6%	0.4%	0.6%	0.2%	14.1%	0.0%	13.7%	0.0%
	2011-2015	0.3%	0.3%	0.5%	0.1%	14.0%	0.0%	13.5%	0.0%
	2010-2014	0.3%	0.2%	0.5%	0.2%	13.8%	0.0%	13.3%	0.0%
2009-2013	0.2%	0.2%	0.6%	0.3%	13.7%	0.0%	13.1%	0.0%	
Percent Pacific Islander, non-Hispanic (B03002)	2018-2022	0.0%	0.1%	0.1%	0.1%	0.2%	0.0%	0.3%	0.0%
	2017-2021	0.1%	0.1%	0.1%	0.1%	0.2%	0.0%	0.3%	0.0%
	2016-2020	0.1%	0.1%	0.1%	0.1%	0.2%	0.0%	0.3%	0.0%
	2015-2019	0.1%	0.1%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2014-2018	0.2%	0.2%	0.0%	0.0%	0.3%	0.0%	0.4%	0.0%
	2013-2017	0.1%	0.1%	0.0%	0.0%	0.3%	0.0%	0.4%	0.0%
	2012-2016	0.1%	0.1%	0.0%	0.0%	0.2%	0.0%	0.4%	0.0%
	2011-2015	0.1%	0.1%	0.0%	0.0%	0.3%	0.0%	0.4%	0.0%
	2010-2014	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.4%	0.0%
2009-2013	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.4%	0.0%	

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent American Indian, non-Hispanic (B03002)	2018-2022	0.1%	0.2%	0.1%	0.0%	0.2%	0.0%	0.3%	0.0%
	2017-2021	0.1%	0.2%	0.1%	0.0%	0.2%	0.0%	0.3%	0.0%
	2016-2020	0.3%	0.3%	0.1%	0.1%	0.2%	0.0%	0.3%	0.0%
	2015-2019	0.8%	0.8%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2014-2018	0.6%	0.7%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2013-2017	0.4%	0.5%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2012-2016	0.5%	0.5%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2011-2015	0.4%	0.5%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2010-2014	0.3%	0.3%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2009-2013	0.4%	0.3%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
Percent two or more races, non-Hispanic (B03002)	2018-2022	1.1%	0.5%	1.2%	0.3%	3.0%	0.1%	3.8%	0.0%
	2017-2021	0.8%	0.4%	0.9%	0.2%	2.8%	0.1%	3.6%	0.0%
	2016-2020	0.7%	0.4%	0.9%	0.3%	2.6%	0.1%	3.4%	0.0%
	2015-2019	0.5%	0.2%	0.7%	0.2%	2.3%	0.1%	3.0%	0.0%
	2014-2018	0.3%	0.2%	0.6%	0.2%	2.2%	0.0%	3.0%	0.0%
	2013-2017	0.3%	0.2%	0.7%	0.2%	2.2%	0.0%	2.9%	0.0%
	2012-2016	0.3%	0.2%	0.6%	0.2%	2.2%	0.0%	2.9%	0.0%
	2011-2015	0.2%	0.1%	0.6%	0.2%	2.2%	0.0%	2.8%	0.0%
	2010-2014	0.1%	0.1%	0.6%	0.2%	2.2%	0.0%	2.7%	0.0%
	2009-2013	0.1%	0.1%	0.7%	0.2%	2.1%	0.0%	2.6%	0.0%
Percent other, non- Hispanic (B03002)	2018-2022	0.1%	0.1%	0.4%	0.3%	0.5%	0.0%	0.4%	0.0%
	2017-2021	0.3%	0.3%	0.5%	0.3%	0.4%	0.0%	0.4%	0.0%
	2016-2020	0.3%	0.4%	0.6%	0.3%	0.4%	0.0%	0.3%	0.0%
	2015-2019	0.4%	0.4%	0.3%	0.1%	0.3%	0.0%	0.3%	0.0%
	2014-2018	0.3%	0.3%	0.4%	0.1%	0.3%	0.0%	0.2%	0.0%
	2013-2017	0.3%	0.3%	0.4%	0.1%	0.3%	0.0%	0.2%	0.0%
	2012-2016	0.3%	0.4%	0.4%	0.1%	0.3%	0.0%	0.2%	0.0%
	2011-2015	0.3%	0.4%	0.4%	0.1%	0.3%	0.0%	0.2%	0.0%
	2010-2014	0.3%	0.4%	0.3%	0.1%	0.2%	0.0%	0.2%	0.0%
	2009-2013	0.4%	0.5%	0.2%	0.1%	0.2%	0.0%	0.2%	0.0%

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent foreign born population (B05006)	2018-2022	32.3%	1.8%	38.2%	1.1%	33.3%	0.1%	26.5%	0.1%
	2017-2021	32.8%	1.9%	37.8%	1.0%	33.5%	0.2%	26.5%	0.1%
	2016-2020	33.0%	2.0%	37.1%	0.9%	33.7%	0.1%	26.6%	0.1%
	2015-2019	33.0%	1.6%	38.2%	1.0%	34.0%	0.1%	26.8%	0.1%
	2014-2018	32.7%	1.8%	37.8%	0.9%	34.2%	0.1%	26.9%	0.1%
	2013-2017	32.4%	1.7%	37.4%	0.9%	34.4%	0.1%	27.0%	0.1%
	2012-2016	32.1%	1.7%	37.8%	0.9%	34.5%	0.1%	27.0%	0.1%
	2011-2015	31.6%	1.8%	38.5%	0.9%	34.7%	0.1%	27.0%	0.1%
	2010-2014	31.4%	1.8%	39.5%	1.0%	34.9%	0.1%	27.0%	0.1%
2009-2013	31.5%	1.9%	40.1%	1.1%	35.1%	0.1%	27.0%	0.1%	
Percent born in Asia (B05006)	2018-2022	0.5%	0.3%	0.7%	0.2%	12.0%	0.1%	10.7%	0.0%
	2017-2021	0.5%	0.3%	0.7%	0.2%	12.0%	0.1%	10.6%	0.0%
	2016-2020	0.9%	0.6%	0.6%	0.1%	12.2%	0.1%	10.6%	0.0%
	2015-2019	0.7%	0.6%	0.6%	0.1%	12.2%	0.1%	10.6%	0.0%
	2014-2018	0.5%	0.3%	0.6%	0.1%	12.2%	0.1%	10.5%	0.0%
	2013-2017	0.5%	0.3%	0.5%	0.1%	12.1%	0.1%	10.4%	0.0%
	2012-2016	0.5%	0.3%	0.4%	0.1%	12.1%	0.1%	10.2%	0.0%
	2011-2015	0.2%	0.2%	0.4%	0.1%	12.0%	0.1%	10.1%	0.0%
	2010-2014	0.2%	0.2%	0.4%	0.1%	12.0%	0.1%	10.0%	0.0%
2009-2013	0.2%	0.2%	0.5%	0.2%	11.9%	0.1%	9.8%	0.0%	
Percent born in Africa (B05006)	2018-2022	0.3%	0.3%	0.5%	0.2%	0.6%	0.0%	0.5%	0.0%
	2017-2021	0.2%	0.2%	0.4%	0.2%	0.6%	0.0%	0.5%	0.0%
	2016-2020	0.3%	0.2%	0.4%	0.2%	0.6%	0.0%	0.5%	0.0%
	2015-2019	0.2%	0.2%	0.4%	0.2%	0.6%	0.0%	0.5%	0.0%
	2014-2018	0.0%	0.1%	0.4%	0.2%	0.6%	0.0%	0.5%	0.0%
	2013-2017	0.1%	0.1%	0.3%	0.1%	0.6%	0.0%	0.5%	0.0%
	2012-2016	0.0%	0.1%	0.2%	0.1%	0.5%	0.0%	0.5%	0.0%
	2011-2015	0.0%	0.1%	0.2%	0.1%	0.6%	0.0%	0.4%	0.0%
	2010-2014	0.0%	0.1%	0.2%	0.1%	0.5%	0.0%	0.4%	0.0%
2009-2013	0.0%	0.1%	0.2%	0.1%	0.5%	0.0%	0.4%	0.0%	

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent born in Latin America (B05006)	2018-2022	31.5%	1.8%	36.9%	1.1%	18.6%	0.9%	13.1%	0.0%
	2017-2021	32.0%	1.9%	36.5%	1.0%	18.7%	0.1%	13.1%	0.0%
	2016-2020	31.7%	2.0%	35.9%	0.9%	18.8%	0.1%	13.2%	0.1%
	2015-2019	32.1%	1.6%	37.0%	1.0%	19.2%	0.1%	13.5%	0.1%
	2014-2018	32.1%	1.8%	36.7%	0.9%	19.4%	0.1%	13.7%	0.1%
	2013-2017	31.6%	1.7%	36.5%	0.9%	19.6%	0.1%	13.8%	0.1%
	2012-2016	31.4%	1.7%	37.1%	0.9%	19.8%	0.1%	14.0%	0.0%
	2011-2015	31.3%	1.8%	37.7%	1.0%	20.0%	0.1%	14.2%	0.1%
	2010-2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2009-2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix 8.2: Economy

Table A8.2.1: American Community Survey (ACS) Economic Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Median household income (B19001)	2018-2022	\$47,010	N/A	\$52,311	N/A	\$83,411	\$439	\$91,905	\$277
	2017-2021	\$39,615	N/A	\$46,319	N/A	\$76,367	\$411	\$84,097	\$236
	2016-2020	\$36,160	N/A	\$41,801	N/A	\$71,358	\$336	\$78,672	\$270
	2015-2019	\$33,171	N/A	\$38,381	N/A	\$68,044	\$347	\$75,235	\$232
	2014-2018	\$31,508	N/A	\$35,188	N/A	\$64,251	\$247	\$71,228	\$217
	2013-2017	\$30,274	N/A	\$32,088	N/A	\$61,015	\$262	\$67,169	\$192
	2012-2016	\$29,543	N/A	\$29,880	N/A	\$57,952	\$331	\$63,783	\$188
	2011-2015	\$28,080	N/A	\$29,389	N/A	\$56,196	\$270	\$61,818	\$156
	2010-2014	\$28,349	N/A	\$29,000	N/A	\$55,870	\$244	\$61,489	\$154
	2009-2013	\$27,634	N/A	\$29,801	N/A	\$55,909	\$256	\$61,094	\$157
Percent of individuals living below poverty (B17001)	2018-2022	29.1%	2.9%	25.7%	1.6%	13.7%	0.2%	12.1%	0.1%
	2017-2021	30.6%	3.1%	26.5%	1.6%	13.9%	0.2%	12.3%	0.1%
	2016-2020	32.4%	3.0%	28.0%	1.7%	14.2%	0.2%	12.6%	0.1%
	2015-2019	34.9%	2.7%	29.6%	1.5%	14.9%	0.1%	13.4%	0.1%
	2014-2018	37.4%	2.9%	31.8%	1.4%	16.0%	0.2%	14.3%	0.1%
	2013-2017	41.2%	3.0%	36.1%	1.5%	17.0%	0.2%	15.1%	0.1%
	2012-2016	43.4%	2.9%	38.4%	1.6%	17.8%	0.2%	15.8%	0.1%
	2011-2015	44.9%	2.9%	39.0%	1.5%	18.2%	0.1%	16.3%	0.1%
	2010-2014	42.9%	2.7%	38.6%	1.6%	18.4%	0.2%	16.4%	0.1%
	2009-2013	41.8%	2.9%	37.4%	1.6%	17.8%	0.2%	15.9%	0.1%
Percent high income (\$125k +) (B19001)	2018-2022	12.4%	2.2%	13.6%	1.1%	32.2%	0.2%	36.4%	0.1%
	2017-2021	8.4%	1.9%	10.4%	1.0%	28.6%	0.2%	32.6%	0.1%
	2016-2020	5.5%	1.4%	8.6%	0.9%	26.0%	0.2%	29.8%	0.1%
	2015-2019	4.6%	1.1%	7.3%	0.8%	24.5%	0.2%	28.0%	0.1%
	2014-2018	3.6%	1.0%	5.7%	0.7%	22.8%	0.2%	26.1%	0.1%
	2013-2017	2.6%	0.9%	3.9%	0.6%	21.0%	0.2%	23.9%	0.1%
	2012-2016	2.8%	0.9%	3.2%	0.5%	19.4%	0.1%	22.1%	0.1%
	2011-2015	3.1%	0.9%	2.9%	0.5%	18.3%	0.1%	20.9%	0.1%
	2010-2014	3.3%	1.0%	2.9%	0.5%	18.0%	0.1%	20.4%	0.1%
	2009-2013	3.1%	1.0%	3.1%	0.5%	17.6%	0.1%	19.9%	0.1%

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*MOEs for the county and the state are obtained directly from the U.S. Census Bureau. MOEs for TCC and control census tracts are derived by LCI in accordance with the methods described by the U.S. Census Bureau in *Understanding and Using American Community Survey Data: What All Data Users Need to Know* (2018). All MOEs are reported at the 90% confidence interval.

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent with less than high school education (S1501)	2018-2022	44.8%	2.3%	43.5%	1.3%	19.7%	0.1%	15.6%	0.1%
	2017-2021	45.9%	2.2%	44.3%	1.2%	20.0%	0.1%	15.8%	0.1%
	2016-2020	46.2%	1.7%	44.5%	1.2%	20.2%	0.1%	16.1%	0.1%
	2015-2019	46.4%	2.2%	45.4%	1.3%	20.9%	0.1%	16.7%	0.1%
	2014-2018	46.6%	2.3%	46.0%	1.3%	21.3%	0.1%	17.1%	0.1%
	2013-2017	47.2%	2.1%	47.0%	1.3%	21.8%	0.1%	17.5%	0.1%
	2012-2016	46.3%	2.1%	47.8%	1.3%	22.3%	0.1%	17.9%	0.1%
	2011-2015	47.2%	2.2%	48.5%	1.3%	22.7%	0.1%	18.2%	0.1%
	2010-2014	48.1%	2.3%	50.6%	1.3%	23.2%	0.1%	18.5%	0.1%
	2009-2013	50.0%	2.6%	50.3%	1.3%	23.4%	0.1%	18.8%	0.1%
Percent with bachelor's degree or higher (S1501)	2018-2022	7.3%	1.4%	9.2%	0.7%	34.6%	0.2%	35.9%	0.1%
	2017-2021	6.7%	1.4%	9.3%	0.7%	34.0%	0.2%	35.3%	0.1%
	2016-2020	7.1%	1.7%	8.8%	0.7%	33.5%	0.2%	34.7%	0.1%
	2015-2019	6.2%	1.0%	7.7%	0.6%	32.5%	0.2%	33.9%	0.1%
	2014-2018	5.4%	0.9%	7.2%	0.6%	31.8%	0.2%	33.3%	0.1%
	2013-2017	5.9%	0.9%	6.9%	0.6%	31.2%	0.2%	32.6%	0.1%
	2012-2016	6.1%	1.0%	6.7%	0.5%	30.8%	0.1%	32.0%	0.1%
	2011-2015	4.8%	0.9%	6.6%	0.5%	30.3%	0.2%	31.4%	0.1%
	2010-2014	4.2%	0.9%	6.6%	0.5%	29.9%	0.2%	31.0%	0.1%
	2009-2013	4.0%	0.9%	6.7%	0.6%	29.7%	0.2%	30.7%	0.1%
Percent employed for the population 16 years and over (B23025)	2018-2022	52.1%	2.1%	56.5%	1.0%	60.2%	0.1%	59.3%	0.1%
	2017-2021	51.4%	2.0%	56.3%	0.9%	60.3%	0.1%	59.3%	0.1%
	2016-2020	52.0%	1.6%	56.3%	1.0%	60.5%	0.1%	59.4%	0.1%
	2015-2019	52.4%	1.9%	56.3%	1.0%	60.7%	0.1%	59.4%	0.1%
	2014-2018	50.9%	2.1%	54.6%	1.0%	60.0%	0.1%	58.9%	0.1%
	2013-2017	48.9%	1.9%	52.7%	1.0%	59.3%	0.1%	58.2%	0.1%
	2012-2016	47.8%	1.9%	51.7%	1.0%	58.6%	0.1%	57.5%	0.1%
	2011-2015	45.7%	1.8%	51.4%	1.0%	58.0%	0.1%	56.9%	0.1%
	2010-2014	45.9%	1.8%	51.1%	1.0%	57.5%	0.1%	56.4%	0.1%
	2009-2013	45.6%	1.8%	51.2%	1.0%	57.5%	0.1%	56.4%	0.1%

Appendix 8.3: Energy

Table A8.3.1: American Community Survey (ACS) Energy Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of households heating home with electricity (B25040)	2018-2022								
	2017-2021	24.8%	3.4%	21.8%	1.5%	27.1%	0.2%	27.7%	0.1%
	2016-2020	21.8%	3.2%	19.8%	1.4%	26.7%	0.2%	27.1%	0.1%
	2015-2019	23.0%	2.3%	20.2%	1.2%	26.1%	0.2%	26.6%	0.1%
	2014-2018	21.8%	2.3%	19.7%	1.1%	25.9%	0.2%	26.4%	0.1%
	2013-2017	21.6%	2.4%	20.4%	1.1%	26.0%	0.1%	26.5%	0.1%
	2012-2016	21.3%	2.4%	22.8%	1.2%	25.9%	0.2%	26.4%	0.1%
	2011-2015	21.8%	2.2%	25.1%	1.3%	25.7%	0.1%	26.2%	0.1%
	2010-2014	18.9%	2.2%	24.4%	1.3%	25.2%	0.1%	25.8%	0.1%
	2009-2013	19.0%	2.3%	25.1%	1.3%	25.0%	0.1%	25.5%	0.1%
Percent of households heating home with other non-fossil fuels (B25040)	2018-2022	0.4%	0.4%	0.3%	0.2%	0.6%	0.0%	2.3%	0.0%
	2017-2021	0.2%	0.3%	0.2%	0.2%	0.6%	0.0%	2.2%	0.0%
	2016-2020	0.2%	0.3%	0.3%	0.2%	0.5%	0.0%	2.2%	0.0%
	2015-2019	0.1%	0.2%	0.1%	0.1%	0.5%	0.0%	2.1%	0.0%
	2014-2018	0.1%	0.1%	0.1%	0.1%	2.0%	0.1%	2.1%	0.0%
	2013-2017	0.1%	0.2%	0.2%	0.1%	0.5%	0.0%	2.1%	0.0%
	2012-2016	0.1%	0.2%	0.2%	0.1%	0.4%	0.0%	2.0%	0.0%
	2011-2015	0.0%	0.2%	0.2%	0.1%	0.4%	0.0%	1.9%	0.0%
	2010-2014	0.0%	0.2%	0.2%	0.1%	0.3%	0.0%	1.9%	0.0%
	2009-2013	0.0%	0.2%	0.3%	0.2%	0.3%	0.0%	1.9%	0.0%

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*MOEs for the county and the state are obtained directly from the U.S. Census Bureau. MOEs for TCC and control census tracts are derived by LCI in accordance with the methods described by the U.S. Census Bureau in *Understanding and Using American Community Survey Data: What All Data Users Need to Know* (2018). All MOEs are reported at the 90% confidence interval.

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of households heating home with utility gas (B25040)	2018-2022	54.6%	3.5%	60.9%	1.6%	63.9%	0.2%	62.3%	0.1%
	2017-2021	60.0%	3.2%	61.5%	1.7%	64.7%	0.2%	63.0%	0.1%
	2016-2020	64.7%	2.9%	65.4%	1.6%	65.2%	0.2%	63.6%	0.1%
	2015-2019	61.2%	2.7%	65.3%	1.4%	65.7%	0.2%	64.1%	0.0%
	2014-2018	61.5%	2.6%	65.4%	1.4%	65.9%	0.2%	64.3%	0.1%
	2013-2017	58.1%	2.6%	64.6%	1.3%	66.0%	0.1%	64.4%	0.1%
	2012-2016	55.9%	2.7%	61.7%	1.4%	66.2%	0.2%	64.6%	0.1%
	2011-2015	54.9%	2.6%	59.4%	1.4%	66.6%	0.2%	65.0%	0.1%
	2010-2014	59.5%	2.6%	60.7%	1.4%	67.2%	0.1%	65.6%	0.1%
	2009-2013	61.3%	2.8%	61.3%	1.5%	67.7%	0.2%	66.0%	0.1%
Percent of households heating home with other fossil fuels (B25040)	2018-2022	2.1%	0.8% ⁰	0.9%	0.2%	1.8%	0.1%	3.7%	0.0%
	2017-2021	1.6%	0.7%	0.9%	0.3%	1.7%	0.0%	3.6%	0.0%
	2016-2020	0.3%	0.3%	0.7%	0.2%	1.6%	0.0%	3.6%	0.0%
	2015-2019	0.7%	0.5%	0.7%	0.2%	1.4%	0.1%	3.5%	0.0%
	2014-2018	0.9%	0.5%	0.7%	0.2%	1.4%	0.0%	3.5%	0.0%
	2013-2017	0.7%	0.5%	0.8%	0.2%	1.4%	0.0%	3.5%	0.0%
	2012-2016	0.9%	0.5%	0.8%	0.2%	1.3%	0.0%	3.4%	0.0%
	2011-2015	1.0%	0.6%	1.0%	0.3%	1.3%	0.0%	3.4%	0.0%
	2010-2014	1.0%	0.6%	0.9%	0.3%	1.3%	0.0%	3.4%	0.0%
	2009-2013	1.2%	0.6%	1.0%	0.3%	1.2%	0.0%	3.5%	0.0%
Percent of houses with no fuel used (B25040)	2018-2022	14.6%	2.3%	15.0%	1.2%	5.8%	0.1%	3.1%	0.0%
	2017-2021	13.8%	2.2%	14.7%	1.2%	5.8%	0.1%	3.1%	0.0%
	2016-2020	13.5%	2.1%	13.5%	1.1%	5.8%	0.1%	3.2%	0.0%
	2015-2019	14.2%	2.0%	13.6%	1.0%	6.1%	0.1%	3.3%	0.0%
	2014-2018	15.1%	2.0%	14.0%	1.0%	6.2%	0.1%	3.4%	0.0%
	2013-2017	19.0%	2.2%	13.9%	0.9%	6.2%	0.1%	3.4%	0.0%
	2012-2016	21.4%	2.3%	14.4%	1.0%	6.1%	0.1%	3.3%	0.0%
	2011-2015	22.1%	2.3%	14.1%	1.0%	5.9%	0.1%	3.2%	0.0%
	2010-2014	20.5%	2.2%	13.6%	1.0%	5.8%	0.1%	3.0%	0.0%
	2009-2013	18.4%	2.3%	12.2%	1.0%	5.6%	0.1%	2.9%	0.0%

Table A8.3.2: Solar PV Systems per 1,000 Households*

Indicator	Dataset Year	Watts TCC Census Tracts	Control Tracts	Los Angeles County	California
Solar PV systems for all building types	2018	17.7	12.0	28.4	49.4

*Solar PV system data were sourced from The DeepSolar Project, a product of Stanford Engineering. For TCC census tracts and control tracts, a weighted average was applied, as based on the number of households within each census tract (using 2011-2015 ACS data).

Appendix 8.4: Environment

Table A8.4.1: Land-Cover Indicators*

Indicator	Dataset Year	Percent area for TCC Project Area	Square Miles
Impervious / buildings	2016	62.4%	1.6
Dry vegetation / barren	2016	14.0%	0.4
Green vegetation	2016	11.7%	0.3
Shadow	2016	11.9%	0.3
Unclassified	2016	<0.1%	<0.1
Water	2016	0%	0

* Land-cover indicators were derived from satellite imagery maintained by the National Agriculture Imagery Program.

Appendix 8.5: Health

Table A8.5.1: American Community Survey (ACS) Health Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent with health insurance coverage (B27001)	2018-2022	87.2%	1.2%	84.4%	1.1%	91.0%	0.1%	92.9%	0.1%
	2017-2021	86.9%	1.4%	84.8%	1.0%	90.9%	0.1%	92.8%	0.1%
	2016-2020	87.5%	1.4%	85.2%	0.9%	90.8%	0.1%	92.8%	0.1%
	2015-2019	86.0%	1.2%	84.4%	0.9%	90.4%	0.1%	92.5%	0.1%
	2014-2018	84.1%	1.3%	82.6%	0.9%	89.2%	0.1%	91.5%	0.1%
	2013-2017	80.6%	1.5%	79.1%	1.0%	86.7%	0.1%	89.5%	0.1%
	2012-2016	77.5%	1.3%	75.2%	1.0%	84.1%	0.1%	87.4%	0.1%
	2011-2015	75.1%	1.3%	71.1%	1.0%	81.6%	0.1%	85.3%	0.1%
	2010-2014	71.5%	1.5%	67.1%	1.1%	79.1%	0.1%	83.3%	0.1%
	2009-2013	70.2%	1.8%	65.6%	1.1%	77.8%	0.2%	82.2%	0.1%
Percent with private health insurance coverage (B27002)	2018-2022	26.8%	2.0%	28.9%	1.2%	58.6%	0.2%	64.2%	0.2%
	2017-2021	26.8%	2.0%	29.8%	1.1%	58.9%	0.3%	64.3%	0.2%
	2016-2020	27.8%	2.2%	30.2%	1.1%	58.8%	0.2%	64.3%	0.2%
	2015-2019	27.6%	2.0%	30.6%	1.2%	58.4%	0.3%	63.8%	0.2%
	2014-2018	25.4%	2.0%	29.5%	1.1%	57.9%	0.2%	63.4%	0.2%
	2013-2017	22.4%	1.8%	28.3%	1.1%	56.8%	0.2%	62.6%	0.2%
	2012-2016	22.3%	1.8%	26.9%	1.0%	55.8%	0.2%	61.8%	0.2%
	2011-2015	21.2%	1.9%	25.4%	1.0%	55.0%	0.2%	61.2%	0.2%
	2010-2014	20.2%	1.8%	23.6%	1.0%	54.1%	0.2%	60.8%	0.2%
	2009-2013	21.8%	1.9%	24.4%	1.0%	54.3%	0.2%	61.0%	0.2%
Percent with public health insurance coverage (B27003)	2018-2022	63.3%	2.5%	59.2%	1.6%	39.7%	0.2%	38.5%	0.1%
	2017-2021	63.1%	2.5%	58.5%	1.6%	39.1%	0.2%	38.0%	0.1%
	2016-2020	63.2%	2.6%	58.4%	1.5%	39.0%	0.1%	38.0%	0.1%
	2015-2019	61.6%	2.2%	57.4%	1.3%	38.8%	0.2%	38.0%	0.1%
	2014-2018	61.9%	2.3%	56.9%	1.3%	38.0%	0.1%	37.2%	0.1%
	2013-2017	61.4%	2.1%	54.7%	1.3%	36.4%	0.1%	35.8%	0.1%
	2012-2016	58.7%	1.9%	52.3%	1.3%	34.7%	0.2%	34.3%	0.1%
	2011-2015	57.4%	1.9%	49.5%	1.2%	32.9%	0.1%	32.6%	0.1%
	2010-2014	54.7%	2.1%	46.8%	1.3%	31.1%	0.1%	30.8%	0.1%
	2009-2013	51.3%	2.3%	44.8%	1.3%	29.7%	0.1%	29.5%	0.1%

* MOEs for the county and the state are obtained directly from the U.S. Census Bureau. MOEs for TCC and control census tracts are derived by LCI in accordance with the methods described by the U.S. Census Bureau in *Understanding and Using American Community Survey Data: What All Data Users Need to Know* (2018). All MOEs are reported at the 90% confidence interval.

Table A8.5.2: Vehicle Collisions Involving Bicyclists and Pedestrians*

Indicator	Dataset Year	Gross Number of Collisions				Normalized by Street Mile			
		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size	
		0ft	50 ft	0ft	50 ft	0ft	50 ft	0ft	50 ft
Bicycle Collision at Injury Level 1: Fatal	2022	0	0	0	2	0	0	0	8.6
	2021	0	0	0	0	0	0	0	0
	2020	0	0	4	4	0	0	17.1	17.1
	2019	0	0	1	1	0	0	4.3	4.3
	2018	1	1	1	1	17.9	17.9	4.3	4.3
	2017	0	1	0	0	0	17.9	0	0
	2016	1	1	1	1	17.9	17.9	4.3	4.3
	2015	0	0	1	2	0	0	4.3	8.6
	2014	0	0	0	0	0	0	0	0
	2013	1	1	1	1	17.9	17.9	4.3	4.3
Bicycle Collision at Injury Level 2: Severe Injury	2022	0	0	16	20	0	0	68.6	85.7
	2021	3	4	11	11	53.8	71.7	47.2	47.2
	2020	5	6	11	15	89.7	107.6	47.2	64.3
	2019	3	4	17	20	53.8	71.7	72.9	85.7
	2018	2	2	12	14	35.9	35.9	51.4	60.0
	2017	1	2	8	8	17.9	35.9	34.3	34.3
	2016	2	2	9	12	35.9	35.9	38.6	51.4
	2015	0	1	6	7	0.0	17.9	25.7	30.0
	2014	2	3	4	5	35.9	53.8	17.1	21.4
	2013	1	2	5	6	17.9	35.9	21.4	25.7

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* Collision data were obtained from the Transportation Injury Mapping System (TIMS). The numbers presented here are conservative in that they do not include collisions that were missing geographic coordinates in TIMS. Street mileage was obtained from OpenStreetsMap (OSM) and totaled 129 miles for the project area and 470 miles for the control tracts. Vehicle collisions involving bicycles and pedestrians are not mutually exclusive because some accidents may involve both modes.

Indicator	Dataset Year	Gross Number of Collisions				Normalized by Street Mile			
		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size	
		0ft	50 ft	0ft	50 ft	0ft	50 ft	0ft	50 ft
Bicycle Collision at Injury Level 3: Visible Injury	2022	5	5	15	25	89.7	89.7	64.3	107.2
	2021	3	3	24	29	53.8	53.8	102.9	124.3
	2020	4	4	29	39	71.7	71.7	124.3	167.2
	2019	10	11	38	50	179.3	197.2	162.9	214.3
	2018	11	12	50	66	197.2	215.2	214.3	282.9
	2017	8	13	55	64	143.4	233.1	235.8	274.3
	2016	5	6	30	40	89.7	107.6	128.6	171.5
	2015	5	8	47	70	89.7	143.4	201.5	300.1
	2014	7	7	72	96	125.5	125.5	308.6	411.5
	2013	6	8	53	70	107.6	143.4	227.2	300.1
Bicycle Collision at Injury Level 4: Complaint of Pain	2022	1	3	6	8	17.9	53.8	25.7	34.3
	2021	2	2	12	16	35.9	35.9	51.4	68.6
	2020	7	9	49	56	125.5	161.4	210.0	240.1
	2019	9	15	56	74	161.4	269.0	240.1	317.2
	2018	6	6	51	66	107.6	107.6	218.6	282.9
	2017	6	8	50	74	107.6	143.4	214.3	317.2
	2016	12	14	63	73	215.2	251.0	270.1	312.9
	2015	5	9	58	76	89.7	161.4	248.6	325.8
	2014	6	6	57	81	107.6	107.6	244.3	347.2
	2013	8	11	65	85	143.4	197.2	278.6	364.4
Pedestrian Collision at Injury Level 1: Fatal	2022	4	4	8	12	71.7	71.7	34.3	51.4
	2021	2	3	5	7	35.9	53.8	21.4	30.0
	2020	5	7	13	16	89.7	125.5	55.7	68.6
	2019	2	4	13	18	35.9	71.7	55.7	77.2
	2018	4	4	19	20	71.7	71.7	81.4	85.7
	2017	2	2	14	15	35.9	35.9	60.0	64.3
	2016	2	2	6	9	35.9	35.9	25.7	38.6
	2015	0	0	8	10	0.0	0.0	34.3	42.9
	2014	2	3	8	11	35.9	53.8	34.3	47.2
	2013	1	1	7	11	17.9	17.9	30.0	47.2

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Indicator	Dataset Year	Gross Number of Collisions				Normalized by Street Mile			
		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size	
		0ft	50 ft	0ft	50 ft	0ft	50 ft	0ft	50 ft
Pedestrian Collision at Injury Level 2: Severe Injury	2022	5	5	51	62	89.7	89.7	218.6	265.8
	2021	10	16	61	76	179.3	286.9	261.5	325.8
	2020	8	10	37	48	143.4	179.3	158.6	205.8
	2019	7	9	46	56	125.5	161.4	197.2	240.1
	2018	8	11	48	60	143.4	197.2	205.8	257.2
	2017	8	10	27	35	143.4	179.3	115.7	150.0
	2016	3	8	23	27	53.8	143.4	98.6	115.7
	2015	3	7	16	20	53.8	125.5	68.6	85.7
	2014	4	6	25	31	71.7	107.6	107.2	132.9
	2013	5	5	24	31	89.7	89.7	102.9	132.9
Pedestrian Collision at Injury Level 3: Visible Injury	2022	5	5	51	55	89.7	89.7	218.6	235.8
	2021	5	5	43	49	89.7	89.7	184.3	210.0
	2020	11	21	81	95	197.2	376.6	347.2	407.2
	2019	8	11	72	92	143.4	197.2	308.6	394.4
	2018	12	18	81	102	215.2	322.8	347.2	437.2
	2017	11	15	76	95	197.2	269.0	325.8	407.2
	2016	19	24	77	92	340.7	430.3	330.1	394.4
	2015	13	17	52	74	233.1	304.8	222.9	317.2
	2014	11	16	61	86	197.2	286.9	261.5	368.6
	2013	15	21	71	88	269.0	376.6	304.3	377.2
Pedestrian Collision at Injury Level 4: Complaint of Pain	2022	5	6	25	32	89.7	107.6	107.2	137.2
	2021	9	9	37	44	161.4	161.4	158.6	188.6
	2020	14	19	79	100	251.0	340.7	338.6	428.7
	2019	17	21	93	117	304.8	376.6	398.7	501.5
	2018	23	29	95	118	412.4	520.0	407.2	505.8
	2017	13	17	77	101	233.1	304.8	330.1	432.9
	2016	8	15	81	105	143.4	269.0	347.2	450.1
	2015	24	29	73	84	430.3	520.0	312.9	360.1
	2014	17	20	56	75	304.8	358.6	240.1	321.5
	2013	13	17	65	90	233.1	304.8	278.6	385.8

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Indicator	Dataset Year	Gross Number of Collisions				Normalized by Street Mile			
		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size	
		0ft	50 ft	0ft	50 ft	0ft	50 ft	0ft	50 ft
Combined Bicycle and Pedestrian Collision at Injury Level 1: Fatal	2022	0	0	0	0	0	0	0	0
	2021	0	0	0	0	0	0	0	0
	2020	0	0	0	0	0	0	0	0
	2019	0	0	0	0	0	0	0	0
	2018	0	0	0	0	0	0	0	0
	2017	0	0	0	0	0	0	0	0
	2016	0	0	0	0	0	0	0	0
	2015	0	0	0	0	0	0	0	0
	2014	0	0	0	0	0	0	0	0
	2013	0	0	0	0	0	0	0	0
Combined Bicycle and Pedestrian Collision at Injury Level 2: Severe Injury	2022	0	0	0	0	0	0	0	0
	2021	0	0	0	0	0	0	0	0
	2020	0	0	0	0	0	0	0	0
	2019	0	0	0	0	0	0	0	0
	2018	0	0	0	0	0	0	0	0
	2017	0	0	0	0	0	0	0	0
	2016	0	0	0	0	0	0	0	0
	2015	0	0	0	0	0	0	0	0
	2014	0	0	0	0	0	0	0	0
	2013	0	0	0	0	0	0	0	0
Combined Bicycle and Pedestrian at Injury Level 3: Visible Injury	2022	0	0	0	0	0	0	0	0
	2021	0	0	0	0	0	0	0	0
	2020	0	0	0	0	0	0	0	0
	2019	0	0	2	2	0	0	8.6	8.6
	2018	0	0	0	0	0	0	0	0
	2017	0	0	1	1	0	0	4.3	4.3
	2016	0	0	0	0	0	0	0	0
	2015	0	0	0	0	0	0	0	0
	2014	0	0	0	0	0	0	0	0
	2013	0	0	2	2	0	0	8.6	8.6

Indicator	Dataset Year	Gross Number of Collisions				Normalized by Street Mile			
		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size		Value for TCC Site by Buffer Size		Value for Controls by Buffer Size	
		0ft	50 ft	0ft	50 ft	0ft	50 ft	0ft	50 ft
Combined Bicycle and Pedestrian at Injury Level 4: Complaint of Pain	2022	0	0	0	0	0	0	0	0
	2021	0	0	0	0	0	0	0	0
	2020	0	0	0	0	0	0	0	0
	2019	0	0	0	0	0	0	0	0
	2018	0	0	0	0	0	0	0	0
	2017	0	0	0	0	0	0	0	0
	2016	0	0	1	1	0	0	4.3	4.3
	2015	0	1	1	1	0	17.9	4.3	4.3
	2014	0	0	0	1	0	0	4.3	4.3
	2013	0	0	0	0	0	0	0	0

Appendix 8.6: Housing

Table A8.6.1: American Community Survey (ACS) Housing Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent renters (B25003)	2018-2022	63.1%	3.0%	71.3%	1.5%	53.8%	0.2%	44.4%	0.2%
	2017-2021	64.8%	2.8%	72.2%	1.5%	54.0%	0.2%	44.5%	0.1%
	2016-2020	63.8%	2.7%	71.8%	1.6%	54.0%	0.2%	44.7%	0.1%
	2015-2019	65.1%	2.4%	71.5%	1.2%	54.2%	0.2%	45.2%	0.1%
	2014-2018	64.7%	2.4%	72.5%	1.2%	54.2%	0.2%	45.4%	0.1%
	2013-2017	65.3%	2.5%	72.8%	1.2%	54.1%	0.2%	45.5%	0.1%
	2012-2016	64.5%	2.4%	72.8%	1.2%	54.3%	0.2%	45.9%	0.2%
	2011-2015	66.5%	2.2%	72.6%	1.2%	54.0%	0.2%	45.7%	0.1%
	2010-2014	66.5%	2.3%	72.1%	1.3%	53.6%	0.1%	45.2%	0.1%
2009-2013	67.3%	2.6%	70.6%	1.3%	53.1%	0.2%	44.7%	0.1%	
Percent homeowners (B25003)	2018-2022	36.9%	2.6%	28.7%	1.3%	46.2%	0.3%	55.6%	0.3%
	2017-2021	35.2%	2.6%	27.8%	1.2%	46.2%	0.3%	55.5%	0.3%
	2016-2020	36.2%	2.8%	28.2%	1.2%	46.0%	0.3%	55.3%	0.3%
	2015-2019	34.9%	2.2%	28.5%	1.2%	45.8%	0.3%	54.8%	0.3%
	2014-2018	35.3%	2.2%	27.5%	1.1%	45.8%	0.3%	54.6%	0.3%
	2013-2017	34.7%	2.4%	27.2%	1.1%	45.9%	0.3%	54.5%	0.3%
	2012-2016	35.5%	2.4%	27.2%	1.1%	45.7%	0.3%	54.1%	0.3%
	2011-2015	33.5%	2.1%	27.4%	1.1%	46.0%	0.3%	54.3%	0.3%
	2010-2014	33.5%	2.3%	27.9%	1.2%	46.4%	0.3%	54.8%	0.3%
2009-2013	32.7%	2.3%	29.4%	1.2%	46.9%	0.3%	55.3%	0.3%	
Percent of households paying ≥30% of income on rent (B25070)	2018-2022	59.0%	4.8%	62.5%	2.6%	54.5%	0.4%	51.6%	0.2%
	2017-2021	60.1%	4.9%	61.6%	2.5%	54.4%	0.4%	51.5%	0.2%
	2016-2020	62.2%	4.7%	62.5%	2.3%	54.4%	0.4%	51.5%	0.2%
	2015-2019	65.4%	4.9%	64.6%	2.3%	54.9%	0.3%	52.1%	0.2%
	2014-2018	68.1%	4.6%	65.9%	2.2%	55.5%	0.3%	52.6%	0.2%
	2013-2017	69.0%	4.4%	68.1%	2.2%	56.1%	0.3%	53.1%	0.1%
	2012-2016	67.0%	4.3%	70.4%	2.1%	56.5%	0.3%	53.6%	0.1%
	2011-2015	66.6%	4.1%	69.9%	2.1%	56.9%	0.3%	54.0%	0.1%
	2010-2014	69.4%	4.4%	70.1%	2.2%	57.0%	0.3%	54.2%	0.1%
2009-2013	67.9%	4.4%	68.6%	2.3%	56.4%	0.3%	54.1%	0.2%	

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*MOEs for the county and the state are obtained directly from the U.S. Census Bureau. MOEs for TCC and control census tracts are derived by LCI in accordance with the methods described by the U.S. Census Bureau in *Understanding and Using American Community Survey Data: What All Data Users Need to Know* (2018). All MOEs are reported at the 90% confidence interval.

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of households paying \geq 50% of income on rent (B25070)	2018-2022	35.0%	3.9%	35.7%	2.1%	29.1%	0.3%	26.6%	0.2%
	2017-2021	33.2%	3.8%	35.4%	2.0%	28.9%	0.3%	26.3%	0.2%
	2016-2020	34.9%	3.8%	37.1%	1.9%	28.8%	0.3%	26.2%	0.2%
	2015-2019	37.4%	3.6%	38.6%	1.8%	29.0%	0.2%	26.6%	0.2%
	2014-2018	40.7%	3.5%	40.8%	1.7%	29.5%	0.2%	27.0%	0.2%
	2013-2017	40.3%	3.4%	43.4%	1.8%	30.1%	0.3%	27.4%	0.1%
	2012-2016	40.7%	3.3%	44.8%	1.7%	30.6%	0.2%	27.9%	0.1%
	2011-2015	41.5%	3.1%	44.7%	1.7%	30.9%	0.2%	28.2%	0.2%
	2010-2014	41.2%	3.3%	44.9%	1.8%	31.0%	0.2%	28.5%	0.1%
	2009-2013	41.1%	3.5%	43.5%	1.8%	30.7%	0.2%	28.3%	0.1%
Percent of households paying \geq 30% of income on mortgage (B25091)	2018-2022	39.8%	5.5%	41.8%	3.6%	16.0%	0.2%	14.8%	0.1%
	2017-2021	45.6%	6.1%	42.6%	3.4%	16.3%	0.2%	15.1%	0.1%
	2016-2020	46.3%	6.8%	42.1%	3.2%	16.7%	0.2%	15.4%	0.1%
	2015-2019	46.5%	5.1%	31.0%	2.8%	25.7%	0.2%	24.4%	0.0%
	2014-2018	48.7%	5.4%	31.5%	2.7%	26.0%	0.2%	24.7%	0.0%
	2013-2017	52.0%	5.4%	31.5%	2.6%	26.5%	0.2%	25.3%	0.0%
	2012-2016	48.6%	4.7%	32.5%	2.7%	27.5%	0.2%	26.2%	0.2%
	2011-2015	51.9%	5.3%	31.1%	2.6%	28.5%	0.2%	27.4%	0.2%
	2010-2014	32.8%	4.8%	31.5%	2.7%	29.4%	0.2%	28.5%	0.0%
	2009-2013	34.7%	4.9%	30.9%	2.8%	30.3%	0.2%	29.7%	0.1%
Percent of households paying \geq 50% of income on mortgage (B25091)	2018-2022	7.8%	2.6%	9.3%	1.9%	5.7%	0.1%	5.0%	0.1%
	2017-2021	7.5%	2.6%	8.4%	1.7%	5.7%	0.1%	5.1%	0.1%
	2016-2020	8.6%	3.1%	8.5%	1.7%	5.8%	0.2%	5.2%	0.1%
	2015-2019	8.2%	2.6%	9.0%	1.5%	5.9%	0.1%	5.3%	0.0%
	2014-2018	9.8%	2.9%	9.3%	1.6%	6.0%	0.1%	5.4%	0.1%
	2013-2017	10.3%	2.9%	9.0%	1.5%	6.3%	0.1%	5.5%	0.1%
	2012-2016	9.3%	2.4%	9.7%	1.6%	6.5%	0.1%	5.8%	0.1%
	2011-2015	8.5%	2.3%	9.8%	1.6%	7.0%	0.1%	6.2%	0.0%
	2010-2014	10.9%	2.9%	10.6%	1.7%	7.4%	0.1%	6.7%	0.0%
	2009-2013	12.4%	3.0%	11.8%	1.8%	7.9%	0.1%	7.2%	0.1%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of households with more than one occupant per room (B25014)	2018-2022	20.8%	2.7%	22.0%	1.5%	11.1%	0.1%	8.2%	0.1%
	2017-2021	21.2%	2.7%	21.5%	1.5%	11.1%	0.1%	8.2%	0.1%
	2016-2020	22.3%	2.6%	21.8%	1.5%	11.2%	0.1%	8.2%	0.1%
	2015-2019	21.4%	2.4%	20.7%	1.3%	11.3%	0.1%	8.2%	0.1%
	2014-2018	22.0%	2.5%	22.0%	1.3%	11.4%	0.1%	8.2%	0.1%
	2013-2017	22.2%	2.5%	23.0%	1.3%	11.7%	0.1%	8.2%	0.1%
	2012-2016	21.9%	2.5%	23.9%	1.3%	11.8%	0.1%	8.2%	0.1%
	2011-2015	23.0%	2.5%	25.3%	1.4%	11.8%	0.1%	8.2%	0.1%
	2010-2014	25.9%	2.7%	26.4%	1.4%	12.1%	0.1%	8.2%	0.1%
	2009-2013	28.2%	2.9%	26.7%	1.5%	12.1%	0.1%	8.2%	0.1%
Percent of households with more than one occupant per room (renters) (B25014)	2018-2022	12.4%	2.3%	16.9%	1.3%	8.4%	0.1%	5.8%	0.1%
	2017-2021	13.6%	2.4%	16.9%	1.3%	8.5%	0.1%	5.9%	0.1%
	2016-2020	13.9%	2.3%	16.8%	1.3%	8.6%	0.1%	5.9%	0.1%
	2015-2019	13.3%	2.0%	16.1%	1.1%	8.8%	0.1%	6.0%	0.1%
	2014-2018	14.2%	2.1%	17.2%	1.1%	8.9%	0.1%	6.0%	0.0%
	2013-2017	14.3%	2.0%	18.5%	1.2%	9.1%	0.1%	6.0%	0.1%
	2012-2016	13.9%	2.0%	19.1%	1.2%	9.2%	0.1%	6.1%	0.0%
	2011-2015	15.5%	2.0%	20.2%	1.2%	9.2%	0.1%	6.0%	0.1%
	2010-2014	18.1%	2.2%	21.0%	1.3%	9.3%	0.1%	6.0%	0.0%
	2009-2013	20.5%	2.5%	21.2%	1.4%	9.3%	0.1%	6.0%	0.0%
Percent of households with more than one occupant per room (homeowners) (B25014)	2018-2022	8.5%	1.6%	5.1%	0.7%	2.7%	0.1%	2.4%	0.0%
	2017-2021	7.6%	1.4%	4.7%	0.7%	2.7%	0.1%	2.4%	0.0%
	2016-2020	8.4%	1.4%	5.0%	0.7%	2.6%	0.1%	2.3%	0.0%
	2015-2019	8.0%	1.4%	4.6%	0.6%	2.5%	0.1%	2.2%	0.0%
	2014-2018	7.8%	1.4%	4.7%	0.6%	2.6%	0.0%	2.2%	0.0%
	2013-2017	7.9%	1.4%	4.5%	0.6%	2.6%	0.0%	2.2%	0.0%
	2012-2016	8.1%	1.4%	4.8%	0.6%	2.6%	0.0%	2.1%	0.0%
	2011-2015	7.5%	1.4%	5.1%	0.6%	2.7%	0.1%	2.2%	0.0%
	2010-2014	7.7%	1.5%	5.4%	0.6%	2.8%	0.1%	2.2%	0.0%
	2009-2013	7.7%	1.5%	5.5%	0.6%	2.9%	0.1%	2.3%	0.0%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of households in same house 1 year ago (renters) (B07013)	2018-2022	52.2%	3.2%	64.5%	1.9%	43.9%	0.3%	35.5%	0.2%
	2017-2021	55.6%	3.2%	64.6%	1.9%	44.0%	0.3%	35.6%	0.2%
	2016-2020	54.5%	2.8%	63.4%	1.9%	44.2%	0.3%	35.6%	0.2%
	2015-2019	56.9%	2.9%	62.1%	1.5%	44.2%	0.3%	35.9%	0.2%
	2014-2018	56.0%	2.8%	61.2%	1.5%	43.9%	0.2%	35.8%	0.2%
	2013-2017	56.0%	3.1%	60.2%	1.5%	43.4%	0.3%	35.6%	0.2%
	2012-2016	53.8%	2.9%	59.2%	1.5%	42.9%	0.3%	35.4%	0.2%
	2011-2015	53.8%	2.9%	58.4%	1.4%	42.0%	0.3%	34.7%	0.2%
	2010-2014	52.4%	2.9%	57.3%	1.6%	41.0%	0.2%	33.7%	0.2%
	2009-2013	52.6%	3.0%	56.2%	1.5%	40.2%	0.2%	32.7%	0.2%
Percent of households in same house 1 year ago (homeowners) (B070103)	2018-2022	41.8%	3.6%	30.0%	1.5%	47.1%	0.3%	53.6%	0.2%
	2017-2021	38.8%	3.4%	29.3%	1.5%	46.9%	0.3%	53.1%	0.2%
	2016-2020	39.8%	3.6%	30.5%	1.6%	46.5%	0.3%	52.7%	0.2%
	2015-2019	38.2%	2.7%	31.2%	1.5%	46.1%	0.3%	52.0%	0.3%
	2014-2018	37.8%	3.0%	30.4%	1.4%	45.9%	0.3%	51.6%	0.2%
	2013-2017	36.1%	3.2%	30.0%	1.5%	45.9%	0.3%	51.4%	0.2%
	2012-2016	36.5%	3.0%	30.4%	1.5%	45.6%	0.3%	51.0%	0.3%
	2011-2015	34.1%	2.7%	30.2%	1.6%	45.9%	0.3%	51.3%	0.3%
	2010-2014	33.8%	2.9%	30.5%	1.6%	46.3%	0.3%	51.7%	0.3%
	2009-2013	33.7%	3.0%	31.6%	1.6%	46.9%	0.3%	52.3%	0.3%
Percent of households in same house 1 year ago (w/ income of >\$75k) (B07010)	2018-2022	4.2%	0.9%	4.9%	0.4%	17.8%	0.1%	20.4%	0.1%
	2017-2021	3.2%	0.7%	3.8%	0.4%	15.8%	0.1%	18.3%	0.1%
	2016-2020	2.2%	0.6%	3.4%	0.4%	14.6%	0.1%	16.8%	0.1%
	2015-2019	1.6%	0.5%	2.7%	0.3%	13.8%	0.1%	16.0%	0.1%
	2014-2018	1.2%	0.4%	2.2%	0.3%	12.8%	0.1%	14.8%	0.1%
	2013-2017	0.9%	0.3%	1.8%	0.2%	11.9%	0.1%	13.8%	0.1%
	2012-2016	1.2%	0.4%	1.6%	0.2%	11.2%	0.1%	13.0%	0.1%
	2011-2015	1.2%	0.4%	1.4%	0.2%	10.7%	0.1%	12.4%	0.1%
	2010-2014	1.2%	0.4%	1.3%	0.2%	10.6%	N/A	12.3%	0.1%
	2009-2013	1.2%	0.4%	1.3%	0.2%	10.5%	N/A	12.1%	0.1%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of households in same house 1 year ago (w/ income of <\$75k) (B07010)	2018-2022	90.6%	6.2%	88.7%	3.2%	72.4%	0.2%	67.8%	0.1%
	2017-2021	91.7%	6.1%	89.3%	3.2%	74.3%	0.2%	69.6%	0.1%
	2016-2020	92.6%	6.9%	90.0%	3.3%	75.3%	0.2%	70.6%	0.1%
	2015-2019	93.1%	1.5%	90.0%	1.0%	75.6%	0.2%	71.0%	0.1%
	2014-2018	92.3%	1.2%	88.8%	1.0%	76.2%	0.2%	71.8%	0.1%
	2013-2017	90.5%	1.3%	88.3%	1.0%	76.5%	0.2%	72.4%	0.1%
	2012-2016	88.4%	0.9%	87.6%	0.9%	76.6%	0.2%	72.8%	0.1%
	2011-2015	86.4%	1.1%	87.2%	0.9%	76.5%	0.2%	72.9%	0.1%
	2010-2014	84.6%	1.3%	86.8%	0.9%	76.1%	N/A	72.5%	0.1%
	2009-2013	84.7%	1.4%	86.7%	0.8%	75.9%	N/A	72.2%	0.1%
Percent of housing units for rent that are vacant (B25002 and B25004)	2018-2022	0.8%	0.5%	1.7%	0.4%	2.1%	0.1%	1.7%	0.0%
	2017-2021	0.7%	0.5%	1.8%	0.4%	2.1%	0.1%	1.7%	0.0%
	2016-2020	0.6%	0.5%	1.9%	0.4%	1.9%	0.1%	1.6%	0.0%
	2015-2019	1.1%	0.6%	1.7%	0.4%	1.8%	0.1%	1.6%	0.0%
	2014-2018	1.1%	0.6%	1.9%	0.4%	1.7%	0.1%	1.5%	0.0%
	2013-2017	1.3%	0.6%	2.1%	0.4%	1.7%	0.1%	1.6%	0.0%
	2012-2016	1.8%	0.7%	2.5%	0.4%	1.8%	0.1%	1.7%	0.0%
	2011-2015	2.9%	1.0%	3.1%	0.5%	1.9%	0.1%	1.8%	0.0%
	2010-2014	3.4%	1.0%	3.6%	0.5%	2.2%	0.1%	2.0%	0.0%
	2009-2013	3.7%	1.1%	3.5%	0.6%	2.3%	0.1%	2.1%	0.1%
Percent of housing units for sale that are vacant (B25002 and B25004)	2018-2022	0.4%	0.4%	0.4%	0.2%	0.4%	0.0%	0.5%	0.0%
	2017-2021	0.4%	0.4%	0.5%	0.2%	0.4%	0.0%	0.5%	0.0%
	2016-2020	0.4%	0.4%	0.5%	0.2%	0.4%	0.0%	0.5%	0.0%
	2015-2019	0.4%	0.4%	0.4%	0.2%	0.5%	0.0%	0.6%	0.0%
	2014-2018	0.7%	0.5%	0.4%	0.2%	0.5%	0.0%	0.6%	0.0%
	2013-2017	0.5%	0.4%	0.4%	0.2%	0.5%	0.0%	0.6%	0.0%
	2012-2016	0.6%	0.4%	0.4%	0.2%	0.5%	0.0%	0.6%	0.0%
	2011-2015	0.9%	0.5%	0.6%	0.2%	0.6%	0.0%	0.7%	0.0%
	2010-2014	1.2%	0.6%	0.9%	0.3%	0.6%	0.0%	0.8%	0.0%
	2009-2013	1.5%	0.7%	0.7%	0.3%	0.7%	0.0%	0.9%	0.0%

Appendix 8.7: Transportation

Table A8.7.1: American Community Survey (ACS) Transportation Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of households with a vehicle available (B08201)	2018-2022	N/A	N/A	N/A	N/A	91.3%	0.3%	93.1%	0.2%
	2017-2021	N/A	N/A	N/A	N/A	91.4%	0.3%	93.1%	0.1%
	2016-2020	N/A	N/A	N/A	N/A	91.2%	0.3%	93.0%	0.1%
	2015-2019	N/A	N/A	N/A	N/A	91.2%	0.3%	92.9%	0.1%
	2014-2018	N/A	N/A	N/A	N/A	91.0%	0.3%	92.8%	0.1%
	2013-2017	N/A	N/A	N/A	N/A	90.8%	0.3%	92.6%	0.1%
	2012-2016	N/A	N/A	N/A	N/A	90.5%	0.2%	92.4%	0.1%
	2011-2015	N/A	N/A	N/A	N/A	90.3%	0.3%	92.3%	0.1%
	2010-2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2009-2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Percent of workers commuting to work alone by car (B08301)	2018-2022	68.4%	2.2%	68.4%	1.5%	68.0%	0.2%	68.4%	0.1%
	2017-2021	69.3%	1.9%	69.7%	1.5%	70.0%	0.1%	70.1%	0.1%
	2016-2020	70.3%	1.9%	69.8%	1.4%	72.1%	0.2%	72.1%	0.1%
	2015-2019	70.9%	1.8%	69.5%	1.2%	74.0%	0.2%	73.7%	0.0%
	2014-2018	69.2%	2.0%	69.5%	1.3%	73.9%	0.2%	73.7%	0.0%
	2013-2017	67.5%	2.2%	66.8%	1.4%	73.7%	0.2%	73.6%	0.1%
	2012-2016	65.2%	2.0%	64.9%	1.3%	73.3%	0.1%	73.5%	0.0%
	2011-2015	63.5%	2.7%	63.7%	1.3%	73.0%	0.2%	73.4%	0.1%
	2010-2014	63.6%	2.7%	61.0%	1.4%	72.6%	0.1%	73.2%	0.1%
	2009-2013	64.3%	2.9%	61.4%	1.3%	72.4%	0.1%	73.2%	0.1%

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*MOEs for the county and the state are obtained directly from the U.S. Census Bureau. MOEs for TCC and control census tracts are derived by LCI in accordance with the methods described by the U.S. Census Bureau in *Understanding and Using American Community Survey Data: What All Data Users Need to Know* (2018). All MOEs are reported at the 90% confidence interval.

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of workers commuting to work by carpool (B08301)	2018-2022	14.1%	2.3%	10.7%	1.0%	9.3%	0.1%	9.5%	0.1%
	2017-2021	12.8%	2.1%	10.2%	0.9%	9.3%	0.1%	9.6%	0.1%
	2016-2020	11.8%	2.0%	10.2%	0.9%	9.5%	0.1%	10.0%	0.1%
	2015-2019	11.8%	1.7%	10.4%	0.9%	9.5%	0.1%	10.1%	0.1%
	2014-2018	12.8%	2.0%	10.5%	0.9%	9.5%	0.1%	10.3%	0.1%
	2013-2017	13.4%	2.0%	11.1%	0.9%	9.6%	0.1%	10.4%	0.1%
	2012-2016	15.2%	2.3%	12.3%	1.0%	9.8%	0.1%	10.6%	0.1%
	2011-2015	16.0%	2.3%	11.9%	1.0%	9.9%	0.1%	10.8%	0.1%
	2010-2014	16.3%	2.4%	12.8%	1.1%	10.3%	0.1%	11.1%	0.1%
	2009-2013	15.5%	2.3%	13.6%	1.2%	10.6%	0.1%	11.3%	0.1%
Percent of workers commuting to work by public transit (B08301)	2018-2022	9.3%	1.7%	11.0%	1.0%	4.6%	0.1%	3.6%	0.0%
	2017-2021	9.8%	1.8%	11.2%	1.0%	4.9%	0.1%	4.1%	0.0%
	2016-2020	11.2%	2.2%	12.3%	1.0%	5.4%	0.1%	4.6%	0.0%
	2015-2019	12.0%	2.2%	13.2%	1.1%	5.8%	0.1%	5.1%	0.0%
	2014-2018	13.2%	2.4%	12.8%	0.9%	6.0%	0.1%	5.1%	0.0%
	2013-2017	13.5%	2.2%	14.6%	1.1%	6.3%	0.1%	5.2%	0.0%
	2012-2016	13.9%	2.1%	15.6%	1.1%	6.5%	0.1%	5.2%	0.0%
	2011-2015	13.7%	1.9%	17.0%	1.2%	6.8%	0.1%	5.2%	0.0%
	2010-2014	12.4%	1.9%	18.5%	1.2%	7.0%	0.1%	5.2%	0.0%
	2009-2013	12.1%	1.8%	17.8%	1.2%	7.1%	0.1%	5.2%	0.0%
Percent of workers commuting to work by foot (B08301)	2018-2022	1.2%	0.6%	1.3%	0.3%	2.5%	0.1%	2.4%	0.0%
	2017-2021	1.1%	0.5%	1.3%	0.3%	2.4%	0.1%	2.4%	0.0%
	2016-2020	0.9%	0.5%	1.3%	0.3%	2.6%	0.1%	2.5%	0.0%
	2015-2019	0.8%	0.5%	1.4%	0.3%	2.7%	0.1%	2.6%	0.0%
	2014-2018	0.8%	0.4%	1.9%	0.4%	2.7%	0.1%	2.7%	0.0%
	2013-2017	1.2%	0.6%	2.4%	0.5%	2.7%	0.1%	2.7%	0.0%
	2012-2016	1.5%	0.6%	2.5%	0.4%	2.8%	0.1%	2.7%	0.0%
	2011-2015	1.8%	0.7%	2.9%	0.5%	2.8%	0.1%	2.7%	0.0%
	2010-2014	2.2%	0.8%	2.6%	0.5%	2.9%	0.1%	2.7%	0.0%
	2009-2013	1.9%	0.8%	2.2%	0.4%	2.9%	0.1%	2.7%	0.0%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Los Angeles County	MOE	Estimate for California	MOE
Percent of workers commuting to work by bike (B08301)	2018-2022	0.8%	0.5%	0.6%	0.2%	0.6%	0.0%	0.7%	0.0%
	2017-2021	0.7%	0.5%	0.5%	0.2%	0.6%	0.0%	0.8%	0.0%
	2016-2020	0.5%	0.3%	0.5%	0.2%	0.7%	0.0%	0.8%	0.0%
	2015-2019	0.6%	0.4%	0.7%	0.2%	0.8%	0.0%	1.0%	0.0%
	2014-2018	0.3%	0.2%	0.8%	0.2%	0.8%	0.0%	1.0%	0.0%
	2013-2017	0.4%	0.3%	1.0%	0.3%	0.9%	0.0%	1.1%	0.0%
	2012-2016	0.4%	0.3%	0.9%	0.3%	0.9%	0.0%	1.1%	0.0%
	2011-2015	0.4%	0.3%	1.0%	0.3%	0.9%	0.0%	1.1%	0.0%
	2010-2014	0.2%	0.2%	1.0%	0.3%	0.9%	0.0%	1.1%	0.0%
	2009-2013	0.2%	0.3%	0.8%	0.3%	0.9%	0.0%	1.1%	0.0%
Percent of workers commuting to work by other modes: taxicab, motorcycle, and other (B08301)	2018-2022	2.0%	0.9%	2.9%	0.5%	1.9%	0.1%	1.6%	0.0%
	2017-2021	1.8%	0.9%	2.8%	0.5%	1.8%	0.1%	1.6%	0.0%
	2016-2020	1.7%	0.8%	2.3%	0.4%	1.7%	0.1%	1.6%	0.0%
	2015-2019	1.1%	0.7%	1.8%	0.4%	1.6%	0.0%	1.6%	0.0%
	2014-2018	0.6%	0.4%	1.5%	0.3%	1.6%	0.0%	1.6%	0.0%
	2013-2017	0.7%	0.4%	0.9%	0.3%	1.5%	0.0%	1.5%	0.0%
	2012-2016	0.6%	0.4%	0.9%	0.3%	1.4%	0.0%	1.4%	0.0%
	2011-2015	0.7%	0.4%	0.9%	0.3%	1.4%	0.0%	1.4%	0.0%
	2010-2014	1.5%	0.7%	1.2%	0.3%	1.3%	0.0%	1.3%	0.0%
	2009-2013	1.5%	0.7%	1.1%	0.3%	1.2%	0.0%	1.3%	0.0%

Table A8.7.2: Plug-in Electric Vehicle (PEV) Registrations *

Indicator	Dataset Year	Gross Number			Normalized per 10,000 Residents		
		TCC Census Tracts	Control Census Tracts	Los Angeles County	TCC Census Tracts	Control Census Tracts	Los Angeles County
Battery electric vehicle (BEV)	2022	88	339	165,512	15.8	18.8	166.6
	2021	55	204	111,752	9.7	11.3	111.5
	2020	29	134	83,209	5.1	7.4	82.9
	2019	15	96	67,059	2.6	5.3	67.0
	2018	13	65	49,566	2.3	3.6	49.1
	2017	11	63	37,977	1.9	3.6	37.6
	2016	8	45	29,370	1.4	2.6	29.2
	2015	14	41	20,516	2.5	2.4	20.4
Plug-in hybrid electric vehicle (PHEV)	2022	66	245	75,441	11.8	13.6	75.9
	2021	62	218	67,304	11.0	12.1	67.2
	2020	44	159	61,854	7.7	8.8	61.6
	2019	40	145	58,563	6.9	8.0	58.1
	2018	22	110	49,027	3.8	6.2	48.6
	2017	7	46	25,777	1.2	2.6	25.5
	2016	6	37	26,648	1.0	2.2	26.5
	2015	10	27	21,547	1.8	1.6	21.5
Fuel cell vehicle (FEV)	2022	6	22	3,780	1.1	1.2	3.8
	2021	4	15	3,105	0.7	0.8	3.1
	2020	0	6	2,339	0	0.3	2.3
	2019	0	3	2,165	0	0.2	2.1
	2018	0	2	1,592	0	0.1	1.6
	2017	0	0	174	0	0	0.2
	2016	0	1	344	0	0.1	0.3
	2015	0	0	57	0	0	0.1
Total EV registrations	2022	160	606	244,733	28.7	33.7	246.3
	2021	121	437	182,161	21.4	24.2	181.8
	2020	73	299	147,402	12.8	16.5	146.8
	2019	55	244	128,237	9.5	13.5	127.2
	2018	35	177	100,185	6.1	9.9	99.2
	2017	18	109	63,928	3.1	6.2	63.3
	2016	14	83	56,362	2.4	4.9	56.0
	2015	24	68	42,120	4.3	4.0	42.0

* EV registration data were obtained by request from the CARB Online Fleet Database. The EV registration data were normalized with 2017 and 2015 five-year ACS data.

Table A8.7.3: Publicly Available Charging Infrastructure*

Indicator	Dataset Year	Gross Number			Normalized per 10,000 Residents		
		TCC Census Tracts	Control Census Tracts	Los Angeles County	TCC Census Tracts	Control Census Tracts	Los Angeles County
Level 2 Stations	2023	7	22	3,3377	1.9	1.4	3.4
	2022	4	24	2,980	1.1	1.5	3.0
	2021	6	23	3,073	1.7	1.4	3.1
	2020	5	21	1,680	1.3	1.3	1.7
	2019	2	9	659	0.3	0.5	0.7
	2018	3	7	857	0.5	0.4	0.9
	2017	2	2	745	0.3	0.1	0.7
	2016	1	2	644	0.2	0.1	0.6
	2015	0	2	547	0	<0.1	0.5
DC Fast-Charging Stations	2023	1	0	318	0.3	0	0.3
	2022	0	1	285	0	<0.1	0.3
	2021	1	1	250	0.3	<0.1	0.3
	2020	0	1	201	0	<0.1	0.2
	2019	0	1	125	0	<0.1	0.1
	2018	0	1	102	0	0.1	0.1
	2017	0	0	103	0	0	0.1
	2016	0	0	94	0	0	0.1
	2015	0	0	61	0	0	0.1

* Charging station data were obtained by request from the Alternative Fuels Data Center (AFDC), a resource administered by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Office. Each dataset includes active stations and does not include stations that have previously opened and closed. In other words, each dataset is a snapshot of currently active stations in that year (taken during fall of each year). The charging station data were normalized with five-year ACS data for the respective year.

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