TRANSFORM FRESNO

2022 PROGRESS REPORT ON IMPLEMENTATION OF THE TRANSFORMATIVE CLIMATE COMMUNITIES PROGRAM GRANT

UCLA Luskin Center for Innovation

Acknowledgments

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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: Fresno resident tries on a new helmet at Bike Safe Fresno event organized by US Green Build Council in November 2021 (Photo credit: Office of Council Member Miguel Arias, District 3 Office).

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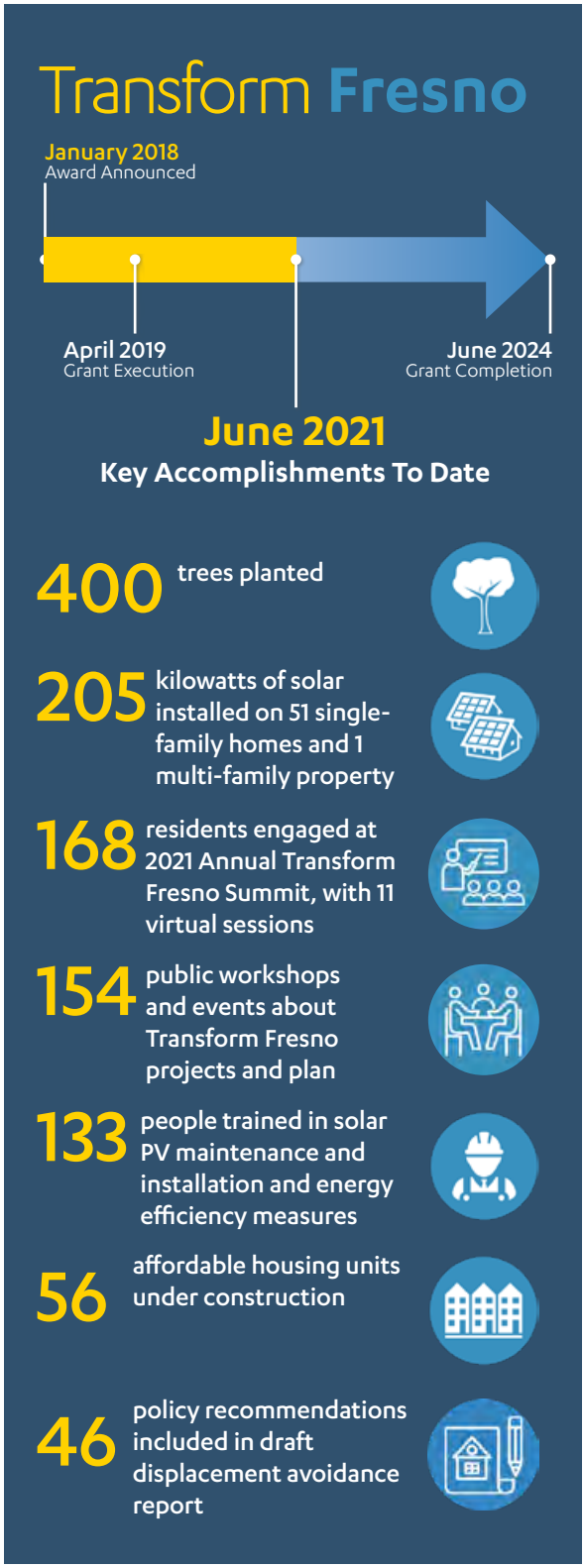
EXECUTIVE SUMMARY

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) is the lead administrator of TCC. During the first round of the program, and through a competitive process, SGC awarded grants to the City of Fresno ($66.5 million), the Watts Neighborhood of Los Angeles ($33.25 million), and the City of Ontario ($33.25 million). During the second round, SGC awarded grants to the City of Sacramento ($23 million) and Pacoima, the Northeast San Fernando Valley neighborhood of Los Angeles ($23 million). In the third and most recent round, SGC awarded grants to the City of Oakland ($28.2 million), the City of Riverside ($9.1 million), and the City of Stockton ($10.8 million).

The UCLA Luskin Center for Innovation (LCI) serves as the lead evaluator for all three Round 1 sites, one Round 2 site (Northeast San Fernando Valley), and one Round 3 site (Stockton). LCI researchers are working with the these communities to document their progress and evaluate the impacts of TCC investments.

This progress report is the third in a series of five that will provide an overview of the key accomplishments and estimated benefits of TCC funded activities in Fresno, collectively referred to as Transform Fresno.[1] This specific report documents progress through the end of FY 2020-21, which overlaps with about two years of grant implementation (April 2019 through June 2021). The majority of implementation has occurred during the COVID-19 pandemic, so project partners' responses to the pandemic are highlighted throughout the report.



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

Young people and community members work together at the Inside Out Community Garden. **Photo credit: Inside Out Community Garden**

Fresno Today

The City of Fresno is California's fifth-largest city, and the largest inland city. Downtown Fresno is the main employment center in the region, with nearly 35,000 workers commuting into the area daily. Fresno has a culturally and ethnically diverse population, and is home to many diaspora, immigrant, and refugee communities. The city has long struggled with environmental, health, and economic disparities, including high concentrations of poverty, air pollution, toxin and pesticide exposure, and health conditions such as diabetes, asthma, and cardiovascular disease.

Located near the geographic center of California and in the San Joaquin Valley, Fresno will increasingly experience the effects of extreme heat as the climate continues to warm. The community continues to need improved access to parks, tree cover, affordable housing, transit, and transportation, and job training and opportunities. To address these and other community needs and goals, residents and other stakeholders from Downtown, Chinatown and Southwest Fresno came together and formed the Fresno Transformative Climate Communities Collaborative.

Transform Fresno

The Collaborative employed a participatory process to identify a series of projects with significant environmental, economic, public health, and social equity benefits for Downtown, Chinatown, and Southwest Fresno (the project area). Anyone who lived, worked, or owned property in these neighborhoods was encouraged to participate. The Collaborative met regularly in 2017 and resulted in an active, engaged, 164-member Community Steering Committee. During these meetings, participants were encouraged to propose projects, and eligible projects were then gathered into five packages that were presented for a community vote. At the final Community Steering Committee public meeting, voting members overwhelming approved a project package designed by residents of Southwest Fresno.

These engagement efforts resulted in Transform Fresno, a community-driven initiative to transform the 4.9-square-mile project area through a suite of projects and plans that will reduce GHG emissions while also providing local environmental, health, and economic and social equity benefits. In early 2018, SGC awarded Transform Fresno a TCC grant of $66.5 million to bring its vision to fruition. Transform Fresno will also leverage $117.3 million in other funding toward this vision. Along with the City of Ontario and the Watts neighborhood of Los Angeles – two other sites awarded Round 1 TCC funding – Fresno is one of the first communities 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.

Projects

Transform Fresno includes a total of 21 projects, 17 of which are funded by TCC dollars and four of which are funded solely by leveraged dollars. The TCC funded and leveraged projects work synergistically to achieve the broad goals of TCC. The TCC funded projects and leveraged projects are consolidated into 11 distinct project types below, and are mapped in Figure 1 (where applicable):

TCC Funded Projects

Active Transportation — Funds the installation of more than 1,154 linear feet of new sidewalk, nearly 1,200 linear feet of Class II bicycle lanes, and signage for more than 1,000 linear feet of Class III bicycle lanes. This project aims to reduce car travel by making alternative mobility options safer and more convenient.

Affordable Housing and Sustainable Communities — Funds the construction of a 57-unit affordable housing development with ground floor retail space, as well as free transit passes for residents and pedestrian improvements (e.g., improving 0.5 miles of sidewalk, installing LED street lighting, planting 26 trees, constructing a permeable green alley, and installing traffic calming measures). Together these investments are aimed at improving transit ridership and active transportation, reducing vehicle miles traveled (VMT), and lowering housing and travel costs for Fresno residents.

Food Waste Prevention and Rescue — Funds the rescue, processing, and distribution of edible food waste and food donations to pantries, kitchens, and community organizations to improve access to local fresh and healthy foods. The edible food rescue process will help reduce 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 — Funds an electric vehicle and electric bicycle sharing mobility network of 34 cars, eight vans, 200 bicycles, along with vehicle charging infrastructure. The low carbon transportation project fills a critical mobility gap and will increase residents' access to services and amenities without producing GHGs from tailpipe emissions.

Rooftop Solar and Energy Efficiency — Funds three distinct projects aimed at installing no-cost rooftop solar systems and energy efficiency measures on residential properties. Together the projects will install rooftop solar PV on nearly 200 low-income single-family homes and five multifamily dwelling units, and install energy efficiency measures in 170 single-family homes. These three projects will enhance local generation of renewable energy and lower electricity and utility costs for property owners.

Urban and Community Forestry — Funds the planting of over 500 trees to increase urban tree canopy and the building of three new community gardens and orchards to increase access to fresh and healthy produce. 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 over 950 trees to increase urban tree canopy, the installation of two miles of bicycle lanes, and the construction of a new 9.5-acre public park. Similar to the urban and community forestry projects, the planted trees will sequester carbon, cut electricity demand, and reduce the urban heat island effect as they mature. The bicycle lanes will encourage more active forms of travel, thereby reducing VMT.

Leveraged Projects

Chinatown Property Based Improvement District (PBID) — Leverages the local and small-business community in Chinatown to develop a PBID with the main goal of retaining, growing, and attracting businesses to the neighborhood. The PBID will support local job creation and economic growth.

EFMP Plus-Up Vehicle Replacement and Incentives — Leverages relationships between project partners and nonprofit organizations to target individuals who receive TCC funded rooftop solar and energy efficiency upgrades with additional rebates and incentives. These will help residents purchase or install an electric or hybrid vehicle, a home charging station, or electric service panel upgrades through the Enhanced Fleet Modernization Program (EFMP) Plus-Up.

Southwest Offsite Improvements — Funds the installation of new trails, sidewalks, and Class II and III bicycle lanes on and around the new West Fresno Satellite Campus. The improvements will support multimodal travel in the neighborhood and access to the new community college campus, thereby reducing VMT.

TCC Connector — Expands the frequency of bus service along a central corridor through the project area, and couples this service expansion with the purchase of an electric bus and installation of electric charging stations. Similar to the affordable housing project, the TCC Connector will improve transit ridership and reduce VMT.

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 projects and to minimize unintended harms. Specifically, grantees were required to develop a community engagement plan (CEP), workforce development plan (WDP), and displacement avoidance plan (DAP). Respectively, these three plans are designed to ensure that TCC investments reflect the community's vision and goals, bring economic opportunities to low-income households, and minimize the risk of gentrification and displacement of existing residents and businesses. In the case of Transform Fresno, these three plans have been adapted in the following ways:

Community Engagement Plan

» **Created** the Collaborative Stakeholder Structure:
- City of Fresno
- 12 project partners
- 16 O&O Committee members
- 3 community partner organizations
- Additional residents, business owners, and property owners in the project area

» **Formalize** resident participation in TCC grant governance through the establishment of the governing body, the Outreach and Oversight Committee, an advisory and grant governance body composed of 16 community leaders representing Downtown, Chinatown, and Southwest Fresno

» **Held** 16 multilingual meetings of the Outreach and Oversight Committee

» **Hosted** 2021 Annual Summit as a virtual conference with 11 sessions using Whova/Zoom
- 168 residents engaged

» **Conducted** outreach to connect residents with TCC projects, including:
- 154 informational workshops and events about Transform Fresno projects and plans (28 on rooftop solar and energy efficiency; 100 on urban forestry, 8 on urban greening; 10 to support the community engagement plan; and 8 Displacement Avoidance Task Force meetings)
- 5 bicycle education sessions hosted by US Green Business Council - Central California, which engaged 17-77 stakeholders at each Bike Safe Fresno event

Workforce Development Plan

» **Developed** Workforce Development Plan
- Created electronic database and began collecting information regarding workforce data, green jobs, training programs and other relevant documents from the region. The database will be used to:
  - Conduct data review and workforce needs assessment
  - Conduct economic analysis of workforce opportunities, with focus on greenhouse gas reducing sectors

» **Connected** residents with training and educational opportunities that provide them with new skills in solar, construction and clean truck technologies:
- 19 students enrolled in first cohort of the VOICE Gladiator Welding Pre-Apprenticeship Training Program
- 7 participants enrolled in Truck Driver Training at United Truck Driving School
- 133 people trained in solar PV maintenance and installation and energy efficiency measures

Displacement Avoidance Plan

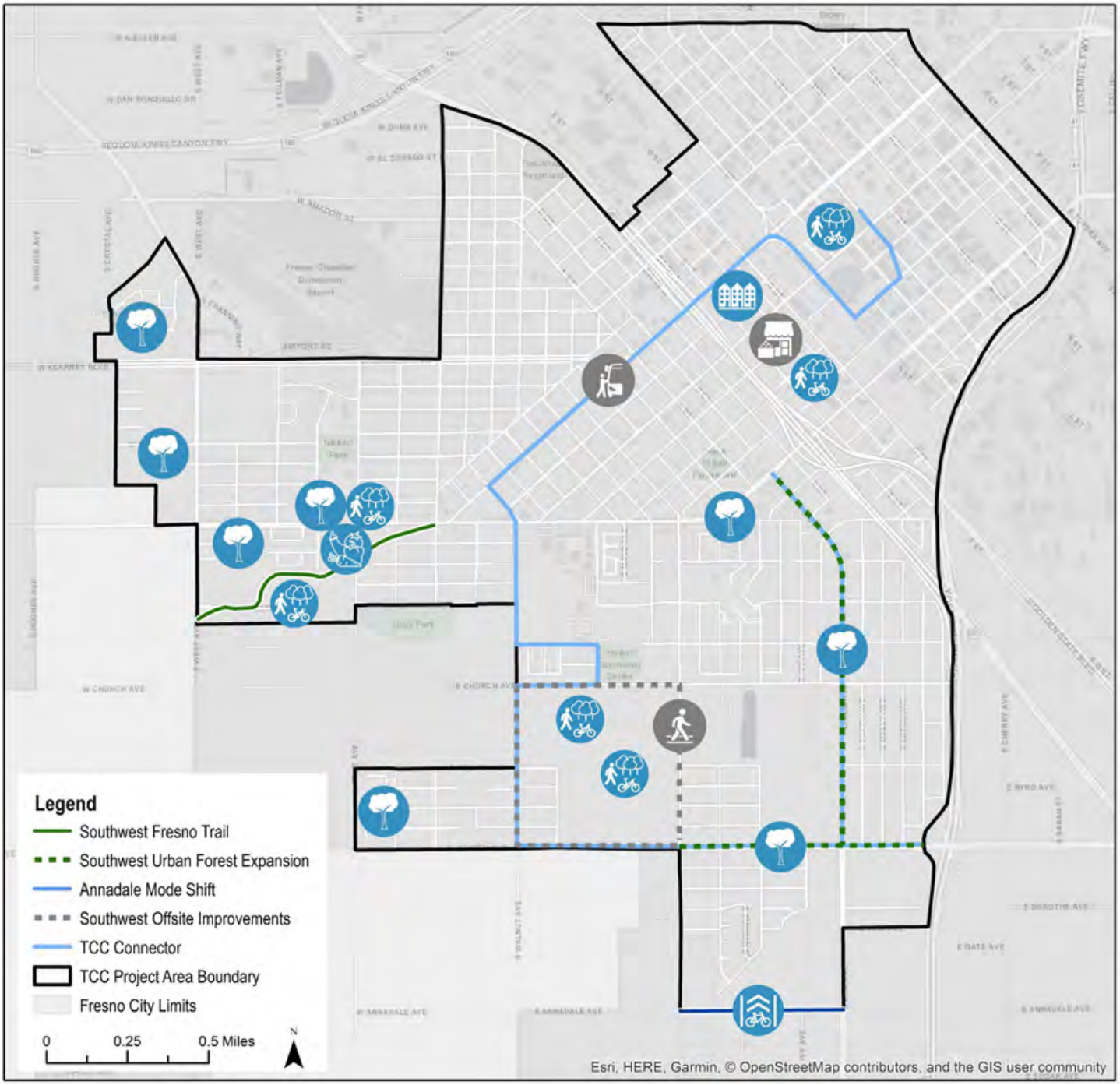
» **Released** draft "Here to Stay: Policy-Based Blueprint for Displacement Avoidance in Fresno" in June 2021. The outreach activities conducted for the report include:
- 20,000 mailers
- 7,500 flyers
- 1,250 phone calls
- 200+ hours 1 x 1 meetings
- 50 interviews
- 4 community workshops

» **Held** 8 Displacement Avoidance Task Force meetings

Project Area

The Transform Fresno project area was configured to bring investment to some of the state's most disadvantaged neighborhoods. All census tracts within the project boundary area are defined as disadvantaged according to CalEnviroScreen 3.0 (100% of the project area ranks within the top 5%). The project area boundary was also drawn to connect key assets , bus routes, and cultural centers within those census tracts. Figure 1 shows where TCC funded projects and leveraged projects are located within the project area.

Figure 1. Project Area Map With Locations of Projects*



***See pages 6-7 for information about what each project icon represents. This map does not include projects or plans that are site-wide (e.g., community engagement) or projects for which locations have not been determined (e.g., rooftop solar installations).** Figure credit: UCLA Luskin Center for Innovation

Anticipated Benefits

Transform Fresno is slated to bring a number of benefits to residents of the TCC project area. The infographic below highlights a non-exhaustive list of these benefits, grouped by indicator type. This list includes only 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 Transform Fresno 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, while impacts refer to changes in the environmental or human conditions that align with the objectives and goals of TCC.

Project Outputs

- **2.5** miles of Class I, Class II, and Class III bike lanes
- **42** new battery-electric vehicles for a car sharing network
- **784** kW of solar power on affordable multi-family developments and single-family homes
- **1** mile of sidewalk construction and improvements
- **17** acres minimum of parks, parklets, and community gardens and orchards
- **200** TCC area individuals trained for residential solar installation projects
- **57** new housing units (56 affordable units)
- **1,458** new trees that will provide shade for buildings and sidewalks
- **31** tons of material diverted from landfills

Project Outcomes and Impacts[2]

- **20,816** metric tons (MT) of avoided GHG emissions (in CO2e)
- **$5,632,338** in travel cost savings for residents who shift their travel modes
- **6,887,661** gallons in avoided stormwater runoff [4]
- **14,832,662** miles of averted travel in passenger miles
- **$4,826,413** in energy cost savings for solar PV and street tree beneficiaries
- **337** direct jobs, **112** indirect jobs, and **190** induced jobs supported by TCC funding[3]

[2] See Appendix 2 for a summary of methods for how these benefits were estimated. Benefits are reported as totals over the operational period of the project. Additionally, some estimates differ from those reported in the previous Transform Fresno annual report, which is the result of improved methodological assumptions.

[3] All jobs are reported as full-time equivalents (FTEs) for one year of work (approximately 2,000 hours).

[4] Updated total that reflects a correction to estimates that were previously reported in the 2020 and 2021 annual progress reports for Urban Greening projects.

Harder to quantify, but nevertheless important, is the leadership and collaboration capacity that will be created in Fresno over the course of the TCC implementation process. This capacity could lay the foundation for other funding and action-oriented opportunities that leverage the TCC projects and plans to bring additional environmental, health, and economic benefits. Moreover, the best practices and lessons learned from Transform Fresno could inform local climate action and investments well beyond the project area.

Fresno Mariposa Plaza schematic design from February 2021. Photo credit: Paul Halajian Architects

Cumulative Accomplishments

Much has happened following SGC's announcement of Transform Fresno's TCC award in 2018. Through the close of the 2020-2021 fiscal year (June 30, 2021), project partners have made considerable progress toward implementing an ambitious, unprecedented climate action initiative.

Key accomplishments of Transform Fresno project partners are described in this section according to the time period 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 the City of Fresno executed its grant agreement with SGC. In light of the challenges of the pandemic, SGC has extended the grant implementation period for Round 1 grantees (from June 2023 to March 2024 in Fresno).

Post-Award Consultation (January 2018 – March 2019)

Formalized Partnerships and Governance Structure

During the post-award consultation phase, Transform Fresno partners participated in a comprehensive review of all projects and transformative plans to ensure they complied with TCC guidelines, and that requisite partnerships were in place to be successful. Key deliverables that came out of this process included: an executed grant agreement with clearly defined work plans and roles for each project partner; an evaluation plan to measure the effects of TCC investment in collaboration with LCI; and the establishment of a collaborative stakeholder structure for coordinating grant governance, known as the Outreach & Oversight Committee (see **Appendix 3** for a list of members).

Grant Implementation (April 2019 – June 2021)

Ramped Up Rollout of GHG Reduction Projects

After the City of Fresno executed its grant agreement with SGC on April 3, 2019, implementation formally began. Now over two and a half years of into the implementation phase, many of Transform Fresno's GHG reduction projects are well underway.

Early implementation milestones for TCC-funded projects include completing construction on the curbs, gutters, sidewalks,bike lane signs, and striping for the Annadale Mode Shift active transportation project (see **page 42**), beginning construction of 56 affordable housing units (see **page 44**), advancing the design and procurement of additional leveraged funding to support the renovation of the St. Rest + Food to Share Hub (see **page 46**), 38 EV chargers installed for the electric vehicle car share network (see **page 48**), completing additional rooftop solar instillations (see box on **page 12** and **page 50**).

The urban forestry projects (see **page 58**), have planted 400 trees, adding vegetation where there was previously concrete. Once the trees have matured, they will also increase shade cover, thereby improving thermal conform during extreme heat events. Meanwhile, the urban greening projects (see **page 63**) have planted more than 600+ native plants in 176 garden plots and 3 farm plots.

All three of Transform Fresno's transformative plans continued to advance in the last year:

Deepened Community Engagement Efforts

The main purpose of Transform Fresno's Community Engagement Plan (CEP) is for residents, workers, business owners, property owners, and other stakeholders in Downtown, Chinatown, and Southwest Fresno to be knowledgeable of Transform Fresno projects, activities, events, and efforts, and to enable these diverse stakeholders to be active participants in all areas of project planning and implementation. For details on CEP, see the box on **page 8** and the summary on **page 36**).

Connected Residents with Training

Transform Fresno's Workforce Development Plan (WDP) is also well underway in connecting residents with training and employment opportunities. The project leverages the existing relationships that the Fresno Regional Workforce Development Board (FRWDB) has built with local employers, training programs, and educational campuses to connect residents with career advancement opportunities. FRWDB has begun implementing the West Fresno Advanced Transportation Technology Training (WFATT) program, with 7 participants enrolled. For the welding pre-apprenticeship element of the WDP, the Voice of Including Community Equitably (VOICE) has partnered with the State Center Community College District (SCCCD) to obtain classroom space and hands-on training facilities for the trainees. Additionally, the City of Fresno will develop a tool to track workforce-related data in an effort to institutionalize low carbon workforce development pathways and career opportunities. For details on the WDP, see the box on **page 8** and the summary on **page 43**).

Coordinated Efforts to Mitigate Displacement

While Transform Fresno Displacement Avoidance Plan (DAP) was initially funded entirely by leveraged sources, it is now supported by a new TCC technical assistance grant. The DAP aims to address the indirect effects of TCC investments on displacement and leverages the ongoing work of the Fresno Housing Authority to augment the local supply of affordable housing in the community. The DAP incorporates findings and recommendations from the City of Fresno's Anti Displacement Task Force (ADTF), which is a citywide effort to keep residents and small businesses in place as more investment, construction, and development comes to the city. To support this effort, Thrivance Group has gathered and analyzed data related to displacement vulnerability within the Transform Fresno project area, conducted educational and informational community workshops and made 48 displacement avoidance policy recommendations in the draft "Here to Stay: A Policy-Based Blueprint for Displacement Avoidance in Fresno" on June 9, 2021. For more information about displacement avoidance efforts, see the box on **page 8** and the summary on **page 41.**

Key Accomplishments Through June 2021

Partnership Formation

- Developed evaluation plan for tracking the outputs and outcomes from each project and plan;
- Established collaborative stakeholder structure, an advisory and governance group made up of residents, property owners, and local businesses in the project area.

Climate Action:

- **26,800** square feet of permeable surfaces installed
- **600+** native plants planted on **1.4** acres
- **400** trees planted
- **176** garden plots and **3** farm plots constructed
- **184** kW of solar PV installed on single-family homes and **21** kW installed on multifamily developments, which serve 400 residents
- **118** individuals trained on rooftop solar PV installation and maintenance and **15** individuals trained on single-family home weatherization and energy efficiency measures
- **38** EV chargers installed for the electric vehicle car share network

Community members shop at the farm stand hosted by the Yosemite Village Permaculture Community Garden & Urban Farm. Photo credit: Chris De León.

BACKGROUND

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 (TCC) 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 Assembly member Autumn 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) reduction projects that provide local economic, environmental, and health benefits to disadvantaged communities.[4] 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) a 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.

[4] 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, all grant applicants must identify a project area that will be the focus of the TCC 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 planting, 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 sources of funding that could complement the TCC investment to implement the community vision.

Last, 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 assure that the implementation will deliver 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, and aforementioned transformative plans help ensure transparency and accountability for the investments, all while building the capacity of communities historically underinvested in, 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.

There are two types of grants administered through TCC: implementation grants and planning 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. The implementation grants are funded through California's Cap-and-Trade auction proceeds while the planning grants are funded through a mix of Proposition 84 funds and Cap-and-Trade auction proceeds.

Program Awards

Since the launch of the program in 2016, there have been three rounds of awards. During Round 1, which was tied to fiscal year (FY) 2016-2017 funding, a total of $133 million was allocated to implementation grants and $1.6 million was allocated to planning grants. For Round 2, which was tied to FY 2018-2019 funding, a total of $46 million was allocated to implementation grants, and a total of $800,000 was allocated to planning grants. Last, for Round 3, which was tied to FY 2019-2020 funding, a total of $48 million was allocated to implementation grants and a total of $600,000 was allocated planning grants. Table 1 provides an overview of the implementation and planning grants that have been distributed through FY 2020-2021.

Table 1: Overview of TCC Implementation and Planning Grants Through FY 2020-2021

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

A GRID Alternatives crew installs solar panels on the Bridges at Florence affordable senior living apartments in the Transform Fresno project area. Photo credit: GRID Alternatives

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.[5]

Following 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. The UCLA Luskin Center for Innovation (LCI) is now the sole contractor in that role, and will continue as such for the first five years of TCC Round 1 grant implementation (2019 through 2024).

For Rounds 2 and 3 of the program, each TCC site selected a third-party evaluator from a list of qualified evaluation technical assistance providers that were preapproved by SGC through an open application process. LCI was selected to serve as the evaluator for the Round 2 grant in Northeast Los Angeles (Pacoima) and the Round 3 grant in Stockton.

LCI's evaluation plans for Rounds 2 and 3 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.

Conceptual Framework for Evaluating TCC

Logic models greatly informed all of the evaluations plans that LCI produced. Logic models illustrate the interim steps that must occur for a project or 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

[5] The 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

- **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.[6] Indicator tracking responsibilities will be partially split among the LCI evaluation team and the grantees. In general, all output-related indicators will be tracked by the grantees, while most outcome and impact related indicators will be tracked by the LCI evaluation team.

Quantitative Methods for Evaluating TCC

To quantitatively assess the effects of TCC, the LCI evaluation team will conduct two different forms of comparison: (1) before-and-after TCC investment; (2) and a 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 LCI evaluation team will measure changes in indicators before and after TCC kickoff, which occurred in 2019 for Round 1 grants. Whenever possible, the LCI evaluation team will construct a five-year pre-kickoff trend line (2014-2018 for Round 1) and a five-year post-kickoff trend line (2019-2023 for Round1).

For the with-and-without comparison, the LCI evaluation team will compare trends in TCC sites to trends in a set of control sites that did not receive TCC investment. This will help 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 has identified control sites that are similar to TCC sites along a number of dimensions, including socioeconomic demographics, climate, and pollution burden (as demonstrated by CalEnviroScreen scores).[7]

In addition to measuring changes within TCC sites and control sites, the LCI evaluation team is also measuring changes at the county and state level for indicators that speak to social equity (e.g., income, employment, housing costs, etc.). This will allow the LCI evaluation team to assess whether TCC is reducing socio-economic disparities between TCC sites and the broader regions where they are located. If, for example, employment slightly increases within TCC sites, but a much greater increase is observed regionally, then the economic gap between TCC sites and nearby communities has not been sufficiently addressed.

In summary, the LCI evaluation team will analyze quantitative data at four geographic scales (where possible):

- **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 boundary area 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 boundary area. See **Appendix 4** for a list of census tracts that will be used as a proxy for Fresno's TCC project boundary area.
- **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 5** for a list of census tracts that will be used as control sites for evaluating the impacts of TCC investment in Fresno.
- **County:** The county in which TCC sites are located (San Bernardino County for Fresno). County-scale measurements are helpful for understanding the degree to which TCC investments are addressing social equity concerns at a regional scale.
- **State:** The state in which TCC sites are located (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.

It's important to underscore that not all indicators easily lend themselves to analysis at the latter three scales. Many TCC indicators rely on the collection of primary data, and it may be cost-prohibitive or technically infeasible to collect that data for control sites, the county, or the state. This is true for indicators such as trees planted and compost produced, which are reported to the LCI evaluation team directly by project partners. Even when secondary data are readily available at all four scales, it may not be prudent to use limited evaluation resources to analyze the data at all of those scales. This is true for bicyclist and pedestrian col-

[6] Ibid.

[7] 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

lision data, which must be cleaned and geocoded before being analyzed. Furthermore, some indicators must be estimated because they cannot be measured directly (e.g., GHG reductions, indirect jobs, etc.). In cases these cases, the LCI evaluation team is providing estimates for TCC sites only. Developing estimates for other geographic scales requires making a number of site-specific assumptions that are outside the LCI evaluation team's scope of work.

It is also important to note that it could take a generation for the transformative impacts of TCC investment to be quantitatively measured. Urban tree canopy, for example, can take 40 years to grow to maturity. Similarly, a career transition can require close to a decade (or more) of education and skill building. Thus, at the end of the relatively short five-year evaluation period, changes in impact indicators may be too small to draw any statistically valid conclusions. Nonetheless, the LCI evaluation team will update impact indicators annually for the sake of maintaining a complete time series. See **Appendix 6** for the latest indicator data the LCI has collected.

Qualitative Methods for Evaluating TCC

Many of the potential benefits of TCC will likely be missed by the quantitative methods previously described. For example, improvements in wellbeing, community capacity to tackle new challenges, and communication across diverse stakeholder groups are difficult to describe in numerical terms. Thus, in order to capture some of the nuanced effects that TCC may have at the individual and community level, the LCI evaluation team will be analyzing qualitative data collected from surveys, interviews, and focus groups.[8]

The LCI evaluation team will prioritize the use of qualitative data collection instruments for examining the aspects of TCC that are particularly novel relative to other grant programs. Specifically, the LCI evaluation team will collect qualitative data about the rollout of the transformative plans and the collaborative stakeholder structure. For Round 1 sites, 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.

Communicating the Effects of TCC

During Round 1 of TCC grant implementation, the LCI evaluation team will release five annual progress reports that document the early effects of TCC investment. The first four progress reports will highlight findings from the LCI evaluation team's quantitative data collection. High-level findings from qualitative and quantitative research will be summarized in the fifth annual progress report, once all qualitative data collection efforts have been completed.

To complement LCI's observations about the effects of TCC, each annual progress report also spotlights the perspectives of TCC project partners and beneficiaries. These perspectives are highlighted in the following chapter, entitled Stories from the Community. The individuals profiled in this chapter are recruited directly by TCC project partners and are interviewed by the LCI evaluation team. From these interviews, the LCI evaluation team develops two case studies per year about how the effects of TCC are being felt on the ground.

Evaluation Activities in Fresno Through June 2021

In the months after TCC grantees executed their contracts, the LCI evaluation team worked with the grantees to operationalize a number of indicator tracking protocols. Specifically, the LCI evaluation team developed reporting forms to streamline tracking activities and trained TCC project leads on how to use those forms. On an annual basis, TCC grantees complete and submit these reporting forms to the LCI evaluation team. Each submission reflects the grantee's activities during the previous fiscal year. Many of the key accomplishments described in this document are pulled directly from the grantees' reporting forms.

By the end of 2019, the LCI evaluation team completed baseline data collection for quantitative indicators. Findings from the baseline data collection process are narratively described in the final chapter of Transform Fresno's first annual report, titled *Transform Fresno: A Baseline and Progress Report on Early Implementation* of the TCC Grant. The underlying data for analyzing baseline trends are also included in Appendix 6 of this report, along with additional data that has been collected and processed within the past year. This Appendix will be updated annually through the release of the 2024 progress report.

With respect to qualitative data collection, the LCI evaluation team has disseminated the community engagement and workforce development surveys in all three Round 1 sites. The LCI evaluation team substantially revised the instruments from the versions posted 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.

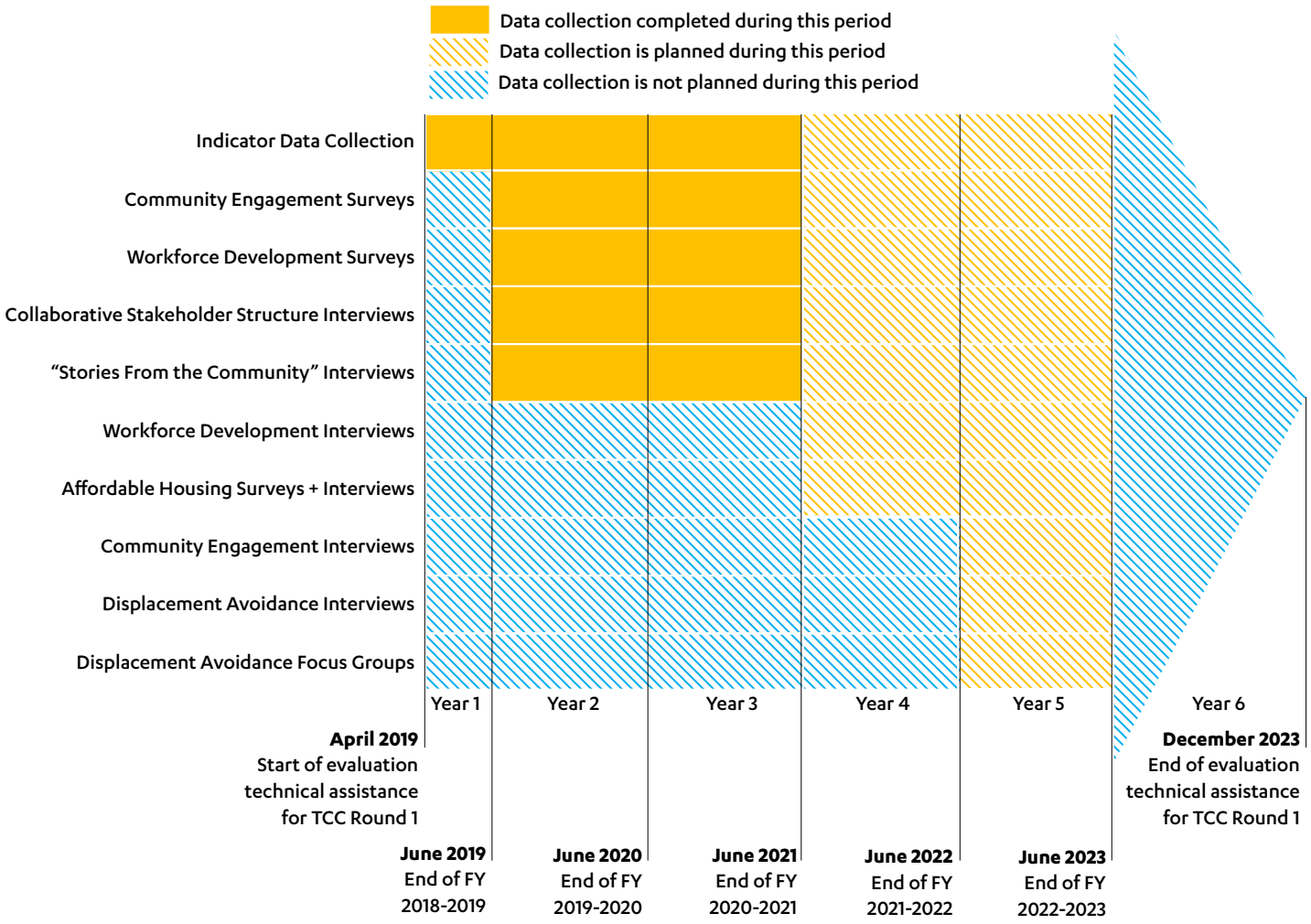
[8] **See Section 3.3 of the TCC Round 1 Evaluation Plan for a summary of the timing, intent, and target population associated with each of these data collection instruments: http://sgc.ca.gov/programs/tcc/docs/20190213-TCC_Evaluation_Plan_November_2018.pdf (since the publication of the Round 1 evaluation plan, the LCI evaluation team has also committed to interviewing members of each TCC site's collaborative stakeholder structure on annual basis about implementation successes, challenges, and opportunities to improve TCC).**

In fall 2019, the LCI evaluation started disseminating final versions of the community engagement and workforce development surveys in Fresno. Community engagement surveys were disseminated in-person at quarterly Outreach and Oversight community meetings. Workforce development surveys were disseminated at the beginning and end of GRID Alternatives and Fresno EOC's training programs. Survey data will be analyzed toward the end of the five-year evaluation period, when it can be interpreted alongside the data that will be collected from forthcoming interviews and focus groups.

In addition to surveys, the LCI evaluation team has conduced interviews annually with members of the collaborative stakeholder structures, as well as select project beneficiaries (i.e., the subjects in the Stories from the Community chapter). Interviews with job training graduates and residents of affordable housing projects will ramp up in the coming year.

Figure 2 provides a summary timeline of data collection activities for TCC Round 1 implementation grants. The timing of pending activities is subject to change.

Figure 2. Timeline of Data Collection Activities for TCC Round 1 Implementation Grants*



***Each "year" in the figure corresponds to a fiscal year (FY) rather than a calendar year.**

Figure credit: UCLA Luskin Center for Innovation

A Brief History of Fresno: The Legacy of Environmental Injustice

TCC grants 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 Fresno, and how environmental injustices from the past still affect the lives of Fresno residents today.

Displacement of Yokuts and Mono People

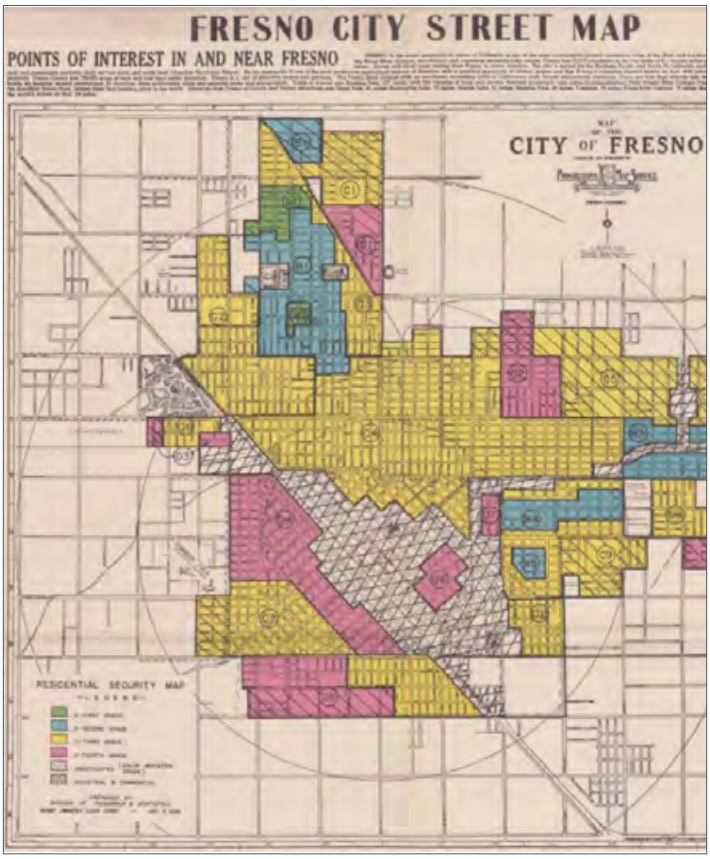
Located in the San Joaquin Valley, the city of Fresno is California's fifth most populous city, with over half a million residents. It has a culturally and ethnically diverse population, and is home to many diaspora, immigrant, and refugee communities. Fresno has long struggled with environmental, health, and economic disparities, including high concentrations of poverty, air pollution, and toxin and pesticide exposure. Situated near the geographic center of California, it will increasingly experience the effects of extreme heat as the climate continues to warm.

The San Joaquin Valley is the traditional homeland of the Yokuts people, who lived in the foothills, and Mono peoples, who occupied the upper reaches of Fresno County's rivers. In 1776, Spanish missionaries disrupted the lives of native peoples by capturing them and exposing them to diseases. By the 1800s, the indigenous population became weakened as more and more outsiders, including gold miners, took their land and displaced them.

Impact of Anti-immigrant and Anti-Black Policies

After Fresno was established by the Central Pacific Railroad in 1872, it saw a boom in agriculture and demanded an expanded labor force. However, jobs that depended on Asian immigrant laborers fell short due to anti-immigrant policies, such as the Chinese Exclusion Act. In the 1940s, the majority of the agricultural labor force became Mexican workers brought by the Bracero Program, which has contributed to the growth of the Latino population in Fresno today. Although Chinese immigrants helped build the Central Pacific Railroad, they were viewed as outsiders by local white residents and were forced to settle west of the tracks in what is now Chinatown. Many more immigrant groups, including Japanese, Armenians, and Mexicans, were also ostracized and joined Chinese immigrants in an area now commonly referred to as Southwest Fresno.

In 1918, Fresno's first general plan was created. It formalized the existing residential segregation by setting aside the southern parts of the city for heavy industrial facilities, air and land pollution, and public housing. After World



A "residential security map" from 1936 shows which areas of Fresno were desirable according to the Home Owners' Loan Corporation—the more racially diverse a neighborhood was, the lower it was ranked. Source: University Of Maryland's T-Races Project

War II, many Black Americans moved to Fresno but found they were confined to living in the city's southwest due to redlining policies. The legacy of the first general plan instituted a harmful pattern that remains today—Fresno's communities of color are relegated to the most unsafe and polluted neighborhoods in the city.

In the 1970s, the population of Fresno tripled. As more and more immigrants from Latin America came to the city, white flight from central neighborhoods began to occur. Development away from its urban core, such as shopping centers, hospitals, and college campuses, in combination with newly constructed freeways, attracted white residents to the affluent neighborhoods of north Fresno. As resources and wealth shifted to the north, white residents experienced improved health and education outcomes, more green spaces, and increased economic development. Contrastingly, the disinvestment in central, southeast, and west Fresno has resulted in increased poverty, the disproportionate impact of environmental hazards, and lack of access to economic opportunities for residents of color. According to a study published in 2018 by the National

Center for Health Statistics, the life expectancy of residents in south and central Fresno is 8 years less than residents of north Fresno.

Coming Together to Address Health Impacts

Today, Fresno is among the top polluted cities in California. Fresno's air quality is affected by several factors, including its role as the region's center for agricultural industry and its location as the intersection of several major state highways. Low elevations in the Central Valley trap emissions from commuter vehicles and logistics vehicles like semi-trucks, along with high levels of pollutants from farming and pesticide use. Up until 2004, farmers in the region would routinely burn tons of debris at the end of a growing season, which generated large amounts of particulate matter in the air. While agricultural burning has decreased, it has not been phased out completely. The Central Valley also experiences above average temperatures, especially in the summer, when ozone pollution becomes much worse due to the longer periods of time ozone can develop in the sunlight. As a result of these conditions, many Fresnans suffer from respiratory illness and poor health outcomes.

Despite the many challenges they face, residents of Fresno display a strong commitment to creating a better future for their city. Local leadership and community groups are working collaboratively to address the inequities in education, workforce development, and the environment. Adopted in 2014 and 2016, respectively, Fresno's General Plan and Zoning Ordinance call for approximately half of future development to be infill–building on vacant or underused land within an already developed area. This strategy is in contrast to previous plans that have encouraged development further outward into the county. By focusing on inward growth and reducing sprawl, the city is decreasing the distance people need to travel, the conversion of valuable agricultural land, and overall the amount of greenhouse gas emissions.

Other investments include the state's first High-Speed Rail station, Bus Rapid Transit, and the revitalization of Downtown Fresno. Often negatively characterized, Downtown Fresno is now being "oriented toward pedestrian-friendliness, the restoration and use of vacant historic buildings, a high-density mix of uses, and 24-hour activity." Additionally, the city has implemented greater water sustainability by increasing the use of surface water and minimizing groundwater pumping. In 2018, a majority of Fresno voters approved Measure P, an initiative to provide clean, safe neighborhood parks, trails, and recreational & art programs throughout the city. These major land use and infrastructure changes are expected to reduce greenhouse gasses and transform the community.

While Fresno has begun to tackle some its most persistent socioeconomic and environmental challenges, these circumstances are a consequence of many decades of discriminatory policies. The community continues to need improved access to parks, tree cover, affordable housing, transit, and transportation, and job training and opportunities. To address these and other community needs and goals, residents and other stakeholders from Downtown, Chinatown and Southwest Fresno came together and formed the Fresno Transformative Climate Communities Collaborative.

Along Highway 99, which runs through Fresno, air pollution is highly visible. Source: John Walker, The Fresno Bee

Former SGC Executive Director Randall Winston (center, standing) leads a discussion on key goals and priorities of TCC in Fresno on July 20, 2017. Photo credit: Leadership Counsel for Justice and Accountability

Transform Fresno: Looking Back and Forward

Fresno's TCC Implementation Grant is the result of years community engagement, strategic planning, and capacity building. This section provides a brief history of that work.

Early Place-Based Planning Efforts

Residents, business owners, place-based civic organizations, and other stakeholders in Downtown, Chinatown, and Southwest Fresno have been active participants in shaping the various plans and policies that impact their neighborhoods. Over the past decade, local community groups have addressed issues such as concentrated poverty, brownfields remediation, public safety, advocacy for parks and public spaces, and community, economic, and housing development.

The development of the City of Fresno's General Plan (2014), the Downtown Neighborhoods Community Plan (2016), the Fulton Corridor Specific Plan (2016), and the Southwest Fresno Specific Plan (2017) was informed through diverse community engagement processes, including stakeholder interviews, neighborhood presentations, public meetings held by advisory and steering committees, participatory design workshops, community workshops, and public comment and questions periods.

The City of Fresno leveraged these existing civic and community engagement structures to ensure that the final TCC project package reflected and directly addressed the needs of the community. The first step was establishing a Collaborative Stakeholder Structure, which formed in 2017 during the development of Fresno's TCC application. Over the course of three months, there were five Community Steering Committee meetings, one town hall, two project development workshops, one project review day, and one supplemental information session. Anyone who lived, worked, or owned property in Downtown, Chinatown, or Southwest Fresno was encouraged to participate and to propose and discuss the types of projects that they wanted to see come to fruition. Sixty-two projects were proposed, of which 37 were eligible for funding consideration under TCC guidelines. The eligible projects were then gathered into five packages, each totaling between $75 million and $77 million, that were presented and voted on in the final meeting.

To be a voting member for the final project package, residents had to prove they lived in the project area and had attended more than 50% of the Community Steering Committee meetings, and workers or property owners had to have attended more than 66% of the meetings. A total of 529 people participated, and of the 164 community members eligible to vote, 126 attended the final meeting and overwhelmingly chose the package of projects designed by residents of Southwest Fresno. This was the largest participatory budgeting process in the City's history, and engaged residents in decision-making processes about projects in their community to an unprecedented extent.

The result of these engagement efforts is Transform Fresno, a suite of projects and plans aimed at reducing GHGs while also providing local environmental, health, and economic co-benefits for Fresno residents. Per the TCC guidelines for Round 1 applicants, Transform Fresno 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 use only 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.

Transform Fresno Begins

In 2018, Transform Fresno was selected by SGC for a TCC grant of $66.5 million. Transform Fresno will also leverage $122.3 million in outside funds toward this vision. The TCC award not only brings a significant influx of financial resources to the community, but it also reinforces the cross-sector partnerships that were built before and during the TCC application process. **Table 2** provides a summary of the final set of Transform Fresno projects, plans, and partners involved with implementation. **Appendix 1** provides a detailed map of where all of the TCC and leveraged projects are located within the 4.9-square-mile area of the Transform Fresno boundary area.

The next three sections of this report provide summary profiles on the various transformative plans, TCC funded projects, and leveraged projects that make up Transform Fresno. 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 since the announcement of Fresno's TCC award through the end of FY 2020-2021. This baseline and initial evaluation period overlaps with about 13 months of post-award consultation and 28 months of program implementation.

Table 2: Summary of Transform Fresno Projects and Plans

Project/Plan Type	Project/Plan Name	Partners	TCC Funding	Leveraged Funding
Community Engagement Plan	Transform Fresno Community Engagement Plan	The City of Fresno;* Fresno Economic Opportunities Commission (Fresno EOC); Thrivance Group; Youth Leadership Institute	$891,083	$0
	Bike Safe Fresno	US Green Building Council – Central California (USGBC-CC);* The City of Fresno; Fresno Bicycle Coalition; Urban Diversity Design; West Fresno Family Resource Center; Edison High School; CSU Fresno	$138,540	$0
Displacement Avoidance Plan	Transform Fresno Displacement Avoidance Plan	The City of Fresno;*,† Thrivance Group; Fresno Anti Displacement Task Force; Central Valley Business Diversity Partnership; Fresno4Biz and Precision Home Loans	$0	$60,500
Workforce Development Plan	West Fresno Advanced Transportation Technology Training	Fresno Regional Workforce Development Board;* West Fresno Advanced Transportation Technology Training	$1,249,432	$ 207,665
	Welding Pre-Apprenticeship Training Program	State Center Community College District (SCCCD);* VOICE Gladiators; The City of Fresno	$1,850,500	$109,020
	Transform Fresno Workforce Development Plan - City Administration	The City of Fresno*	$110,000	$0

* Project lead
† The City of Fresno also received a technical assistance grant of $133,333 from SGC and DOC to fund citywide displacement avoidance activities. These citywide activities directly support the implementation, goals, and strategies of the DAP.

Table 2 continues next page›

Project/Plan Type	Project/Plan Name	Partners	TCC Funding	Leveraged Funding
Active Transportation Program	Annadale Mode Shift	Self-Help Enterprises;* The City of Fresno	$343,000	$150,000
Affordable Housing and Sustainable Communities	The Monarch @ Chinatown	Fresno Housing Authority*	$10,807,319	$0
		The City of Fresno*	$977,902	$26,862,085
Food Waste Prevention and Rescue	St. Rest + Food to Share Hub: Healthy Food Rescue and Redistribution Hub	Fresno Metro Ministry;* Saint Rest Baptist Church	$1,488,280	$3,855,922
Low Carbon Transportation	Clean Shared Mobility Network	Fresno Metro Black Chamber of Commerce;* San Joaquin Valley Latino Environmental Advancement and Policy; Shared use Mobility Center; Bethel Temple Early Readers Preschool; Fresno Career Development Institute	$7,717,014	$2,292,900
Rooftop Solar and Energy Efficiency	EOC Partnership for Energy Savings and GHG Reductions in SW Fresno	Fresno EOC;* Fresno Local Conservation Corps (LCC); GHS Govans; SunPower	$3,208,377	$0
	GRID Solar Collaborative Single-Family Partnership	GRID Alternatives;* The Fresno Center; Stone Soup	$883,826	$535,808
	GRID Solar Collaborative Multi-Family Partnership	GRID Alternatives;* The Fresno Center; Stone Soup	$352,549	$110,000
Urban and Community Forestry	Southwest Urban Forest Expansion	The City of Fresno;* Tree Fresno	$212,199	$0
	Yosemite Village Permaculture Community Garden and Urban Farm Incubator	Fresno Metro Ministry;* Youth Leadership Institute; Fresno Housing Authority	$367,500	$415,944
	Inside Out Community Garden	Fresno EOC;* Another Level Training Academy; The City of Fresno	$98,000	$0
	Yosemite Village Community Orchard	Fresno Metro Ministry;* Youth Leadership Institute; Fresno Housing Authority	$262,500	$0
Urban Greening	Southwest Fresno Trail	The City of Fresno;* USGBC-CC; Urban Diversity Design	$1,978,959	$0
	Chinatown Urban Greening	The City of Fresno;* USGBC-CC; Urban Diversity Design	$6,965,696	$0
	Mariposa Plaza	The City of Fresno*	$3,859,000	$0
	Park at MLK Magnet Core	The City of Fresno*	$5,489,606	$1,500,000
	St. Rest + Food to Share Hub: Urban Heat Island Mitigation	Fresno Metro Ministry;* Saint Rest Baptist Church	$62,220	$141,854
	Fresno City College: West Fresno Satellite Campus	State Center Community College District (SCCCD)*	$16,542,746	$70,000,000

*Project lead

Project/Plan Type	Project/Plan Name	Partners	TCC Funding	Leveraged Funding
Leveraged Projects	Chinatown Property Based Improvement District	The City of Fresno*	$0	$75,000
	EFMP Plus-Up Vehicle Replacement and Incentives	Fresno EOC;* Valley Clean Air Now (Vally CAN)	$0	$530,000
	Southwest Offsite Improvements	City of Fresno*	$0	$15,732,648
	TCC Connector	City of Fresno Department of Transportation*	$0	$3,532,774
Total**			**$65,856,250**	**$122,316,200**

*Project lead
**TCC funding subtotal shown here does not include additional grant money provided for grant administration and other related activities.

TRANSFORM FRESNO: STORIES FROM THE COMMUNITY

Members of the Yosemite Village Permaculture Community Garden & Urban Farm Incubator complete a mural on the garden's storage container. Photo credit: Chris De León, Fresno Metro Ministry

AS A COMMUNITY-LED INITIATIVE, Transform Fresno 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 rollout of Transform Fresno and/or benefited from the initiative's suite of projects and plans. The case studies are provided in reverse chronological order in 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 Transform Fresno. Thus, their purpose is to be illustrative, but not exhaustive, of the ways in which Transform Fresno has touched the lives of community stakeholders.

Meeting community needs through healthy food rescue and redistribution

Initial renderings of the Saint Rest Food to Share Hub. Photo credit: Paul Halajian Architects

Background:

This case study spotlights how TCC funding is supporting the expansion of community projects and partnerships like the St. Rest and Food to Share food distribution program. For additional information about the Southwest Fresno Community Food Hub, see **page 62.**

Interviews for this story were conducted in December 2021.

BERNICE WILEY, the director of food ministries at St. Rest Baptist Church (St. Rest), grew up in "The Garden" neighborhood of Fresno. Her idyllic childhood inspires her work with St. Rest because she wants others to grow up in a family-oriented, healthy place as she did. But the area has changed and today has high levels of homelessness, poverty, and hopelessness. Yet Wiliey says: "I have such hope in my heart for this city...As long as we can find the tools and the inroads and the means to do it, I know we have the will to do it."

Wiley took over St. Rest's 40-year-old food distribution program in 2009. In 2016, when the need for food outpaced their supply, she forged a partnership with Food to Share, a program run by Fresno Metro Ministry. Food to Share rescues nutritious food that would otherwise be wasted and delivers it to partners, like St. Rest to distribute to families facing daunting food hardship and lacking the financial means to purchase healthy food.

Wiley is committed to serving the 100 to 200 people who come to each food giveaway, which take place three times a month. "Our motto is rain, sleet, or snow, we'll be there" she says. One man has been picking up food for years and reported to Wiley that the food he received was critical to his health and nourishment through several lean periods in his life. The impact of the food hub on the community extends beyond the individuals who show up. Wiley noted that residents share food with neighbors who are not able to stand in line for food.

"Our motto is rain, sleet, or snow, we'll be there."
BERNICE WILEY

Bernice Wiley speaks at a groundbreaking event for the St. Rest + Food to Share Hub in July 2021. Photo credit: Edward Smith, The Business Journal

Driven by an interest in the connection between food waste prevention and pollution, Willey is excited about the benefits of the food waste prevention project funded by TCC. She hopes the project will help improve the air quality, and ultimately rectify the fact that life expectancy in Southwest Fresno is currently lower than other parts of the county.

She isn't stopping with this project, however. Wiley has other dreams for cultivating a healthy community through food. TCC funding will support the reconstruction and expansion of the current St. Rest warehouse, and add a commercial kitchen to the site. Wiley looks forward to teaching people how to make meals with unfamiliar ingredients and establishing a central location where vulnerable populations can be connected to resources.

KEITH BERGTHOLD, the executive director at Fresno Metro Ministry, was born in Central Fresno and has a long history of serving the community. He works with many churches in Southwest Fresno, including St. Rest because of their commitment to food distribution. Bergthold shares their dedication to addressing the contradiction that the Fresno region is a major center of both food production and food insecurity.

To help St. Rest achieve its vision for expansion, Bergthold submitted a TCC proposal to support repairs and improvements on an aged and underutilized 6,000 square foot warehouse. The team was awarded $1.5 million from TCC to transform the existing building into a food recovery, storage, office, and distribution center that serves the entire Fresno metro area.

After the project began, the St. Rest and Food to Share team found it necessary to expand the project with an additional, new building to safely execute their plans for a commercial community kitchen and training area. They have raised nearly $3.7 million additional funds to do so.

"Transformative Climate Communities is a total game changer for Southwest Fresno – it's unlike anything else that's happened before."
KEITH BERGTHOLD

Keith Bergthold (right) presents visuals of a separate project that will be constructed adjacent to the Food Hub. Photo credit: Build Healthy Places Network

Bergthold hopes to complete all warehouse renovations by August 2022, and new building construction by May 2023, and to initiate youth education programs to teach more than 600 students about food security leadership, cooking and gardening. Always seeking to do more for his community, Bergthold would also like to open four or five more food hubs throughout Fresno with expanded offerings.

Bergthold enthusiastically believes "Transformative Climate Communities is a total game changer for Southwest Fresno – it's unlike anything else that's happened before."

RON WILEY, a deacon at Saint Rest Baptist Church (St. Rest), moved to Fresno to attend Fresno State University in 1971 and has been deeply engaged with the community ever since. Wiley, a big city kid from San Bernardino, first thought Fresno was too country, but he soon fell in love with the community and the people he met. Now retired, Wiley has remained an active member of St. Rest and is a highly engaged volunteer with the food ministry.

Ron Wiley and Bernice Wiley distribute food outside the warehouse currently used for the St. Rest Food Distribution program. Photo courtesy of Bernice Wiley

Fresno has experienced many changes since the 1970s: the population size more than tripled, rural areas turned into urban sprawl, redlined portions of the city fell further into neglect, and high levels of poverty and food insecurity plagued the Southwest Fresno community. To counteract the hopelessness many Fresno residents feel, Wiley has turned to food distribution where he helps engage 25 volunteers to, as the Bible says, "feed the hungry, clothe the naked, visit the sick."

Wiley follows his wife Bernice's lead – working with food banks and other partners to build community visibility and capacity. He is optimistic about the investments from TCC, "I think it is a catalyst to improve the overall quality of life in Southwest Fresno, a catalyst to bridge the gap and close inequities in the system."

"[TCC] is a catalyst to improve the overall quality of life in Southwest Fresno, a catalyst to bridge the gap and close inequities in the system."
RON WILEY

Strengthening Fresno's roots through soil

Background:

This case study spotlights how the Yosemite Village Community Garden and Urban Farm Incubator is utilizing TCC funding to increase resident access to tree coverage, healthy food, and open green space. For additional information about the four Urban and Community Forestry projects, see **page 58.**

Interviews for this story were conducted in April and June 2021.

Member of the Yosemite Village Permaculture Community Garden & Urban Farm Incubator waters corn, sunflowers, and zinnias in 2020. **Photo credit: Chris De León, Fresno Metro Ministry**

PATRICIA HUBBARD was born and raised in Riverdale, a little town just outside of Fresno, and has lived in the city itself since 1996. Solidifying her roots here, Hubbard's three children and siblings also live in Fresno. But her feeling of connection to the place has grown since getting involved with the Yosemite Village Community Garden and Urban Farm Incubator (Yo'Ville Community Garden).

> **"The people that I garden with, the volunteers, staff and other gardeners, are like a family or community."**
> PATRICIA HUBBARD

Hubbard first heard about the garden after someone knocked on her door and handed her a flier. Already familiar with gardening in her backyard, Hubbard signed on to volunteer. While she expected to help grow the garden, she has been pleasantly surprised by the relationships she's developed. For her, the community connection is the most rewarding part of being involved with the garden.

After having a successful first year with a garden plot, Hubbard expanded in her second year. She joined the Yo'Ville Urban Farm Incubator program, giving her a half acre of land to tend. She has also gained new skills. "There's an ongoing process of learning," she says proudly, as she

Patricia Hubbard at the Yosemite Village Permaculture Community Garden & Urban Farm Incubator
Photo credit: Jesse Martindale, Fresno Metro Ministry

describes how she has become familiar with planting new species of plants. She also credits TCC's investment in the Yo'Ville Community Garden as allowing her to learn the business and finance side of running a farm.

Looking ahead, Hubbard is proud the produce grown in the garden will benefit more neighbors via the new Farmer's Market. "In a community like ours, with limited options for fresh vegetables, healthy food, this is so important." Hubbard added.

Chris De León at the Yosemite Village Permaculture Community Garden & Urban Farm Incubator.
Photo credit: Jesse Martindale, Fresno Metro Ministry

CHRIS DE LEÓN is the Community Garden Manager and a staff member at Fresno Metro Ministry, the lead project partner at the Yo'Ville Community Garden. Having moved to Fresno when he was four years old, his love for Fresno runs deep. But he also recognizes the health disparities stemming from the lack of access to healthy food and healthy green spaces, and a concentration of environmental pollution in Southwest Fresno.

For De León, who had wanted to be involved in a community garden ever since he was in high school, the Yo'Ville Community Garden is a dream come true. Like Hubbard, De León feels that the most rewarding part of working in the garden is that it brings the community together. When COVID hit, he reports "we saw a surge in residents applying to the garden because more people wanted outdoor space, a place to be outside of their homes. I think the garden helped a lot of the residents who live nearby to have an outlet and somewhere they can go to be together that is safer."

The garden has also generated community-wide benefits that specifically address food insecurity in Southwest Fresno. "The Yo'Ville Community Garden is creating a local food system," De León explains. "Fresno residents are able to buy fresh produce that's organically grown onsite. They can walk over to the back of the site and meet the farmer that's growing the food, see the practices they're utilizing. Ultimately, it's about caring for the land, our fellow community members, and our bodies," he stated.

"The garden provides much needed green space and space for residents to grow their own food and learn how to start a small-scale urban growing operation."
CHRIS DE LEÓN

MIGUEL AVENDAÑO is one of the community members that Chris De León recruited to start a half acre urban farm at the Yo'Ville site. Avendaño has years of experience growing food. He moved to Fresno in 2003 for agricultural jobs and has worked throughout the Central Valley ever since. He appreciates the abundance of work opportunities and he, his wife, and two children have established a solid foundation in Fresno.

In 2021, Avendaño joined Yo'Ville's Farm Incubator program. The farm incubator provides the land, shared tools, access to water, and learning opportunities for new small farmers wanting to grow in ecologically sustainable ways. Avendaño shares "I am producing organic vegetables, using methods that won't damage the environment and our health."

"In five to ten years, my goal is to have many acres planted, to have employees, to be growing and selling fresh, organic produce wholesale. It will give my family a more comfortable and stable life."
MIGUEL AVENDAÑO

Miguel Avendaño and son at the Yo'Ville Farm Stand.
Photo credit: Chris De León, Fresno Metro Ministry

Avendaño is now producing enough to sell and supplement his income with the produce he grows at the community farm. He partners with the other farmers from Yo'Ville Urban Farm Incubator to run a farm stand, where they sell their produce every 1st and 3rd Saturday of the month. "My primary goal is to grow my farm in three years," Avendaño says. "It would not be possible to start from zero without support from the incubator."

Women shape displacement avoidance efforts

Background:

This case study highlights how Transform Fresno is committed to advancing equitable community development. Specifically, the case study looks at the work of three individuals, Sabrina Kelley, Dr. Kathryn Forbes, and Dr. Destiny Thomas, who lead the displacement avoidance efforts in Fresno. For additional information about the Displacement Avoidance Plan, see **page 41.**

Interviews for this story were conducted in July & August 2020.

"I'm involved because I want equitable, affordable housing and improvements for quality of life throughout the City of Fresno." Sabrina Kelley at the groundbreaking of the Almy Street. Photo credit: The Fresno Bee

SABRINA KELLEY has deep roots in Fresno. Her family has a long history of community service and advocacy in Southwest Fresno, where she went to high school. Now when Kelley is at Transform Fresno community meetings, she feels the presence of her grandparents, aunts and uncles.

> **"I feel like I'm picking up the family baton to advocate for affordable housing and for neighborhoods that are walkable and safe."**
>
> SABRINA KELLY

As the Community Relations Consultant and foundation manager for Wells Fargo, Kelley guides philanthropic investments for the Central Valley. She has led collaborative efforts to raise money for affordable housing, improved pedestrian infrastructure, and expanded public spaces, including the Almy Street Playground in Southwest Fresno. Her role also involves small-business support for ethnic minority groups, as well as financial health and literacy for low- and moderate-income families and individuals.

Kelley become involved with Transform Fresno because of her personal and family commitment to advancing equitable community development, affordable housing, and livable neighborhoods. She now serves as a member of the O&O Committee for Transform Fresno.

She became involved with the Displacement Avoidance Plan (DAP) as a member of the hiring committee for the DAP consultant. She focused on ensuring applicants demonstrated an understanding of equity, inclusion, and culturally appropriate community development strategies.

Kelley hopes the DAP will create opportunities for marginalized residents to share their ideas and have their voices heard. An example of why this is important can be found in the older neighborhoods south of Herndon Avenue, where residents continue to grapple with long-standing inequities that stem from historical issues like red lining that kept people of color living in low opportunity neighborhoods.

> **"I'd like to see residents in the TCC footprint empowered to create the changes they want to see in their neighborhoods."**
>
> SABRINA KELLY

DR. KATHRYN FORBES is a professor at California State University, Fresno, and the program coordinator for the Women's, Gender and Sexuality Studies Department. Dr. Forbes is a member of the city's Anti Displacement Task Force (ADTF), where she helps identify current and future areas of displacement, and the metrics and data the city needs to track in order to prevent displacement.

"The introduction of all the [anti-displacement] policy alternatives that residents could choose from was completely eye-opening for this region, both for city leaders, for advocates, and for residents... to realize there are a bunch of different tools to address displacement."

DR. KATHRYN FORBES

Photo credit: Fresno State Women's, Gender and Sexuality Studies

Dr. Forbes believes that the process for developing the plan and the community engagement efforts for TCC have had an immediate impact on how the local government functions in Fresno. For example, the city started to consider anti-eviction and tenant protection policies after community advocacy around housing issues in the Transform Fresno project area.

Photo credit: Thrivance Group

DR. DESTINY THOMAS called Fresno home for six years after she graduated from college. She considers it a special place, saying it was easy for her to build community, relationships, and kinships. Dr. Thomas is the founder and CEO of Thrivance Group, the consultant leading the design and implementation of the DAP.

Dr. Thomas brings a wealth of experience and knowledge to Fresno's anti-displacement efforts. She has worked professionally in the environmental and transportation planning fields, and as a community organizer, social worker, artist, and creative. In every role she stays heavily rooted in a racial justice framework.

Dr. Thomas developed a method for interviewing and engaging with people experiencing gender-based violence and houselessness in Los Angeles, called Thrivance Project. Using this method, Thrivance Group is conducting a range of participatory civic engagement activities to inform the DAP. These activities include interviews with community stakeholders and local government officials and an oral history project to bring visibility and cultural recognition to historically marginalized groups in the project area.

"Through the strategies that we're offering, and through the collective engagement work across the project itself, the elected officials will see that the community actually knows what's best and that they don't lose any political will or power by listening to and honoring those needs."

DR. DESTINY THOMAS

Thrivance Group has recommended a set of implementable anti-displacement policies to the Fresno City Council that reflect community needs and contribute to healing past institutional harms. See the DAP profile on **page 41** for additional information about the recommendations

Training a clean energy workforce in Fresno

Background:

This case study explores how TCC funded solar installation training and installation programs have financially benefited both workers and low-income homeowners in Fresno. The case study does so through the lens of Luther Mays, who has completed several trainings through GRID Alternatives and now sees how families can benefit financial from new solar systems. For more on Fresno's free solar program, see **page 54.**

The interview for this story were conducted in December 2019.

A GRID Alternatives crew installing solar panels on the Bridges at Florence affordable senior living apartments in the Transform Fresno project area. Photo credit: Fresno Housing Authority

LUTHER MAYS moved to Fresno this past summer to help a family member. Mays is a longtime California resident who grew up and spent most of his life in the Sacramento area. When he moved to Fresno, he immediately began looking for a new job but faced several obstacles. Mays doesn't own or have access to a vehicle, and relies heavily on the Fresno Area Express public transportation system and his bicycle to get around the Fresno and Clovis areas. He decided to start volunteering with GRID Alternatives a few weeks after relocating — often biking up to 12 miles round-trip to get to and from GRID Alternative's Central Valley offices.

After volunteering on a few solar installations, he learned he could become more formally trained by joining GRID Alternatives Installation Basics Training-200 (IBT-200) program. The IBT-200 is a five-week course that includes 40 hours of classroom learning and 96 hours of on-the-job training in rooftop solar PV system installation and maintenance. Enrolled participants also become certified in basic workplace safety with the Occupational Safety and Health Standards 10-hour (OSHA 10) training, and receive a cardiopulmonary resuscitation (CPR) credential.

Mays says his motivation for joining the training program came from wanting to learn a useful skill, and to help himself and other people. He now knows how to safely install and configure a solar array and has logged over 100 hours of installation experience.

Luther Mays, a GRID Alternatives solar installation trainee. Photo credit: GRID Alternatives

"You mean I can keep doing this? Sign me up!"

LUTHER MAYS

Luther Mays (right above and center below) working at an installation project job site. Photo credit: GRID Alternatives

"The most rewarding part of my solar installation training is how excited and kind the families are as our crew is setting up their solar PV system."

LUTHER MAYS

The most rewarding part of his training was how excited and kind the families were as the crews were setting up their solar PV system. He also enjoys being able to help relieve families of the financial burden of their electricity bills, which can have a big impact. Mays graduated from the IBT-200 program in September 2019 and is inspired to keep working toward a career in the solar field.

GRID Alternatives is now offering a shortened version of the IBT-200 training specifically to residents and workers who live in the project area, namely Downtown, Chinatown, and Southwest Fresno. The TCC solar training course will offer 12 hours of classroom learning and 38 hours of on-the-job training, along with a CPR credential. GRID Alternatives' goal is to train 200 Transform Fresno residents. Trainees who graduate from the TCC solar program can continue on to the full IBT-200 course and gain additional credentials and installation experience.

Mays was not familiar with the TCC program before his first day volunteering on a solar installation. GRID Alternatives staff told him about Transform Fresno and the types of projects coming to the area. Mays is optimistic about how the TCC solar projects will benefit the community, primarily by lowering the cost of household utilities, and by equipping residents with skills that will help them find employment in the solar field. He thinks that when California's solar mandate takes effect in 2020 — which will require all new homes to come with solar attached - the Transform Fresno project area will be uniquely positioned by having a trained and qualified solar workforce.

"[A solar system from] GRID Alternatives can take care of 80% of a families' electric bill, which for a lot of people, is a big expense."

LUTHER MAYS

Residents come together in participatory budgeting process

Background:

This case study spotlights how TCC funding has supported deep community engagement work in the Fresno. Specifically, the case study looks at the work of three individuals who serve as members of the Outreach and Oversight (O&O) Committee. Artie Padilla, Jordan Gustafson, and Barbara Wilson have helped implement the Community Engagement Plan, detailed on **page 38.**

Interviews for this story were conducted in December 2019.

The consultant Raimi & Associates presents the findings from five pop-up community engagement workshops at an O&O Committee quarterly meeting on June 12, 2019. Photo credit: UCLA Luskin Center for Innovation

ARTIE PADILLA, born and raised in Fresno, is a member of the O&O Committee representing Southwest Fresno. In 2008, Padilla founded the Every Neighborhood Partnership (ENP), a nonprofit that runs youth, community, and economic development programs in over half of Fresno's 92 public elementary school districts. The initiatives he helps run at ENP have allowed him to get a deeper understanding of the community's strengths, social needs, and disparities. He says becoming more involved with TCC was a no-brainer given how the program's goals naturally fit in with the work his organization does.

Padilla took part in shaping the investment priorities for the Transform Fresno initiative. For him, one of the most rewarding parts of this participatory budgeting process was the civic involvement of residents attending the early TCC meetings.

"One of the ripple effects [of the community engagement process] is that it helped spark more civic engagement throughout the area, especially among folks that normally don't attend community meetings," said Padilla.

He thinks that the TCC program presents a great opportunity to continue building civic infrastructure and integrating other important neighborhood information into the public meeting format of Transform Fresno quarterly meetings.

Photo credit: UCLA Luskin Center for Innovation

"To me, community engagement anchors our TCC initiative and is building that civic infrastructure of community through involvement on a weekly, monthly basis ... not just a hodgepodge of a meeting here or a meeting there."

ARTIE PADILLA

Photo credit: UCLA Luskin Center for Innovation

"It wasn't behind closed doors. The projects were out in the open in these community meetings. There was no one else deciding except the community."

JORDAN GUSTAFSON

JORDAN GUSTAFSON grew up in Clovis, the neighboring city of Fresno. She refers to herself as a "boomerang" resident — she moved back to Downtown about four years ago after living in New York City. In addition to being a small-business owner and start-up founder, Gustafson works at Bitwise Industries — an incubator for tech-related companies and jobs in Fresno. She also chairs the Downtown Fresno Foundation, which is dedicated to economic development and revitalization within the City's central business district. She is a member of the O&O Committee.

The potential of the TCC funds for Downtown revitalization sparked Gustafson's curiosity and motivated her to attend the first TCC community meeting. Once there, she realized that the projects being discussed were an opportunity to uplift community voices and reinvest in areas that have been overlooked or underserved in the past.

"The way the community put together the budget and project package was invaluable to creating a sense of trust, and the participatory budgeting was extremely successful in bringing people together to agree on the direction of TCC funding," stated Gustafson.

BARBARA WILSON has decades-long ties to the Fresno community. Her father, a preacher and church elder, moved her family to Fresno in the early 1960s. After graduating from Edison High School, her career moved her to the Bay Area, where she raised her two daughters. In 2008, Wilson retired from a nationally known financial institution, as well as the City and County of San Francisco's tax collector's office, to return to Fresno to care for her mother. She took on new roles in the community and regularly attends neighborhood meetings. Wilson owns properties in Chinatown, serves as a member of the O&O Committee, and is the secretary for the Chinatown Empowerment Center, a nonprofit formed by local property and business owners to support the improvement of the social, physical, and cultural environment of Historic Chinatown.

Wilson was reading a newspaper when she came across an announcement for the first TCC Community Steering Committee meeting. She called friends to ask if they had heard about it and told them they should check it out. She hasn't missed a TCC-related meeting since.

She says her motivation to get involved, and to stay involved, comes from her love and connection to Fresno as her home. The opportunity to see redevelopment in her own community excites her. The most rewarding part of the participatory budgeting process for her was the transparency of information and the belief that the insight she brought to the discussions as a longtime resident was truly valued and incorporated.

Photo credit: UCLA Luskin Center for Innovation

"Most urban development projects happen to the community as opposed to happening for the community.... I want to ensure the community engagement is thoughtful and intentional and those who live and work here today will still call it home after the redevelopment is complete."

BARBARA WILSON

TRANSFORMATIVE PLANS

One of the five Community Engagement Plan pop-up workshops, shown here at the Chinatown Empowerment Center site on May 30, 2019. Photo credit: City of Fresno

THE COUPLING OF TRANSFORMATIVE PLANS alongside GHG 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 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. 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 Transform Fresno structured its three transformative plans and the progress that has been made toward plan implementation.

Community Engagement Plan

Residents of Southwest Fresno vote on the final package of Transform Fresno projects in 2017. Photo credit: Strategic Growth Council

A DIVERSE GROUP OF STAKEHOLDERS is shaping the planning, implementation, and governance of Transform Fresno and its various projects supported by TCC. The Community Engagement Plan (CEP) leverages the many partnerships formed throughout the TCC application and project implementation process. Partnerships among stakeholders include the City of Fresno, local nonprofits, community-based and faith-based organizations, project area residents, community leaders, and business owners.

The City of Fresno, along with nonprofit groups and a consultant, led the engagement process around Fresno's TCC proposal. After the TCC grant award, the City of Fresno, the Outreach and Oversight (O&O) Committee, and the consultant Raimi & Associates Inc. guided the process for developing the CEP. In 2019, the City hired a full time Program Implementation Manager and Senior Accountant Auditor to manage the Transform Fresno program and facilitate the financial and grant requirements. In 2020, the City executed contracts with three partner organizations (Fresno EOC, Thrivance Group, and Youth Leadership Institute) to facilitate engagement throughout the implementation of Transform Fresno projects.

Goals and Activities for Community Engagement and Empowerment

The overarching goal of the CEP is for residents, workers, business owners, property owners, and other stakeholders in Downtown, Chinatown, and Southwest Fresno to be knowledgeable of Transform Fresno projects, activities, events, and efforts, and to enable these diverse stakeholders to be active participants in all areas of project planning and implementation. The plan outlines specific methods for the City of Fresno, community partners, and project partners to follow to ensure impactful information sharing and communication, participation, and documentation.

Recent Accomplishments*

- 168 residents engaged at 2021 Annual Transform Fresno Summit, which was hosted as a virtual conference with 11 sessions
- Branding and branding guide created and implemented project-wide
- Website designed, created, and launched
- Launched Youth Leadership Development Program, designing and delivering a virtual curriculum to 8 young people in first cohort
- 4 bicycle education sessions hosted, engaging 17-77 stakeholders at each session
- 2 videos launched: "Bike to School PSA" & "Bike to School Transportation Challenge"

* Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

Community members can learn about TCC activities through the Transform Fresno website, social media, newsletters, texts, emails, door-to-door canvassing, mailings, and posted flyers. Residents and stakeholders can actively shape and participate in Transform Fresno activities through quarterly O&O Committee community meetings, project-specific workshops, preference and opinion surveys, and by directly engaging in projects as volunteers, trainees, or beneficiaries. Furthermore, the CEP strives to foster the next generation of community leaders by establishing a TCC Fresno Youth Leadership Development Program. The outcomes, successes, and lessons learned from Transform Fresno projects will be documented and shared throughout the grant period.

In these ways, the CEP provides transparency, continue to build trust within the community, and expand and institutionalize civic engagement. The multifaceted CEP, with its collaborative and capacity-building activities, is integral to achieving the change desired.

Governance

Transform Fresno has a Collaborative Stakeholder Structure that includes the City of Fresno, 12 project partners, 16 O&O Committee members, and three community partner organizations, along with residents, business owners, and property owners in the project area. The Collaborative began in 2017 to develop Fresno's TCC application. In a series of Community Steering Committee meetings, people who lived, worked, or owned property in the project area gathered to propose, discuss, and identify projects that would bring environmental and economic benefits to Downtown, Chinatown, and Southwest Fresno. This community-driven participatory budgeting process resulted in 164 active voting members, and ensured that the final package of Transform Fresno projects directly addressed the needs and challenges of the community. After the final project package was approved, 16 of the 164 eligible voting members were appointed to the O&O Committee, which serves as the main advisory and oversight body of Transform Fresno.

Since 2020, three community partner agencies have carried out specific tasks and roles in the CEP. Fresno EOC serves as the Prime Community Partner, as well as the Direct Outreach, Media and Communications, and Event Coordination Partner. The Youth Leadership Institute is the Leadership Development Community Partner, and Thrivance Group is the Data and Reporting Community Partner.

Community Engagement Plan

Project Details

- » Launch date: September 2019
- » Anticipated completion date: March 2024
- » Project leads: The City of Fresno
- » TCC grant funds: $891,083.00
- » Leveraged funds: $0

Progress Through FY 2019-2020

- » 11 multilingual O&O Committee quarterly community meetings held, with 30-60 stakeholders at each
- » 120 community members engaged at 5 workshops run by the consultant Raimi & Associates in May 2019
- » Draft CEP Framework released in May 2019; final CEP released in September 2019
- » 142 community engagement surveys collected in May 2019 and June 2020
- » 5 youth ambassadors hired and trained under the Youth Leadership Development Program
- » City of Fresno awarded the Central Section 2020 Award of Excellence and Achievement in Planning and the California Chapter 2020 Award of Merit in Public Outreach by the American Planning Association (APA) for the CEP and the participatory Transform Fresno final project package development and selection process

Responses to COVID-19

- » All activities, including quarterly Outreach and Oversight community meetings were conducted virtually, streamed on social media and CMAC TV.
- » City of Fresno has designed outreach events to ensure the health of staff and public. Some hybrid events (both virtual and in-person) may be possible for project milestone events and the Transform Fresno Annual Summit.

Bike Safe Fresno

Another element of the CEP is being led by the US Green Business Council - Central California (USGBC-CC). In conjunction with the urban greening and active transportation projects that will build new bike lanes and multiuse trails (Southwest Fresno Trail, Annadale Mode Shift, and the West Fresno Satellite Campus), USGBC-CC will increase knowledge and awareness of bicycle usage and safety, and share information about current and future bike infrastructure projects. In fall 2020 and summer 2021, USGBC-CC hosted five bicycle education sessions in collaboration with the Fresno County Bicycle Coalition, four of them online and one in-person. They also worked with students on a bike to school project in the Spring 2021. The Bike Safe Fresno program offered one additional in-person event in November 2019, where attendees learned about safe bicycle infrastructure, upcoming projects in their community, safe bicycle practices, and participated in a bicycle rodeo.

USGBC-CC is partnering with the Fresno County Bicycle Coalition and its Smart Cycling trainers for the bicycle education workshops. Other project partners include Urban Diversity Design, West Fresno Family Resource Center, Edison High School, CSU Fresno, and the City of Fresno. The project is expected to be completed in 2022.

Transform Fresno residents of all ages attended the Bike Safe Fresno event in November, 2019. Photo credit: USGBC-CC

Community Engagement Plan - Green Trails Project

Project Details

- » Launch date: September 2019
- » Anticipated completion date: August 2022
- » Project leads: US Green Business Council - Central California
- » TCC grant funds: $138,540
- » Leveraged funds: $0

Progress Through FY 2019-2020

- » 1 hands-on bicycle workshop held by the USGBC-CC in November 2019

Responses to COVID-19

- » USGBC-CC developed a website and moved the Bike Safe Fresno program online by holding virtual bicycle education classes for the community and local students.
- » Some community events (e.g., bike to school days) paused until schools in Fresno reopened.

Displacement Avoidance Plan

Cover of the draft report "Here to Stay: A Policy-Based Blueprint for Displacement Avoidance in Fresno" released in June 2021. Photo credit: Thrivance Group

TRANSFORM FRESNO'S DISPLACEMENT AVOIDANCE PLAN (DAP) outlines policies intended to understand the impact of TCC investments on existing households and businesses, while opening discussions about preventative measures and proactive solutions to displacement. These efforts seek to address the indirect effects of investments that may lead to displacement by raising the value of residential and commercial land. None of Transform Fresno's activities will directly cause displacement, as housing units will be constructed on vacant underutilized lots and transportation activities will occur within the public right of way.

The City of Fresno has led the implementation of the DAP in consultation with the Anti Displacement Task Force (ADTF), O&O Committee, Thrivance Group, and other stakeholders. The ADTF has 11 appointed members representing residential tenant organizations, commercial tenant organizations, developers, and advocacy agencies, and works to analyze data and recommend solutions related to causes and areas of displacement. The O&O Committee provides direction for policy development. With support from a new TCC technical assistance grant, Thrivance Group was hired in April 2020 as the DAP consultant. Residents and business owners provide feedback and information regarding displacement concerns, and project partners report project-specific data to Thrivance Group. Additional partner agencies include Precision Home Loans, the Central Valley Business Diversity Partnership, and the Fresno Regional Workforce Development Board.

Recent Accomplishments*

- Released draft "Here to Stay: Policy-Based Blueprint for Displacement Avoidance in Fresno" in June 2021. The outreach activities conducted for the report include: 20,000 mailers, 1,250 phone calls, 50 interviews, 7,500 flyers, 200+ hours 1 x 1, 4 community workshops
- 6 Anti Displacement Task Force meetings held

* Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

Strategies to Avoid Displacement of Very Low- and Low-Income Households

To preserve the supply of affordable housing, Thrivance Group has gathered and analyzed data on how housing burdens are changing within and outside the project area, conducted educational workshops, provided a report on overall displacement vulnerability, and made 46 policy recommendations to ensure residents can remain in their homes.

To protect the tenure of existing residents, Thrivance gathered and analyzed data related to displacement vulnerability within the Transform Fresno project area, conducted

educational and informational community workshops and made displacement avoidance policy recommendations by releasing the draft "Here to Stay: A Policy-Based Blueprint for Displacement Avoidance in Fresno" on June 9, 2021.

To support neighborhood stabilization and wealth building, the City of Fresno will partner with Wells Fargo to conduct Homebuyer and Financial Literacy Education Summits for residents. The biannual events will cover the home buying process, the necessary qualifications for buying a home, and present an educational credit seminar. The City will also implement a project labor agreement (PLA) that will apply to all city-led construction projects funded by the TCC grant. The PLA will encourage contractors and unions to hire qualified workers from the Transform Fresno project area and will identify thresholds for hiring local workers to gain and keep wealth in the neighborhoods employing residents.

Strategies to Avoid Displacement for Local and Small Businesses

To protect small businesses from displacement, the City of Fresno will support the potential creation of a small-business alliance, business development and retention programs, and financial assistance to local and minority-owned institutions. The City has hired a consultant (separate from the DAP consultant) to conduct a feasibility study for the creation of a Chinatown Property Based Improvement District (PBID). The consultant will hold community outreach meetings to provide information about the potential district.

Leveraging the additional TCC technical assistance grant, the City worked with the Fresno Metro Black Chamber of Commerce to establish a business development and retention program. The program provided one-on-one, culturally relevant coaching sessions and technical assistance to ten small businesses in the Transform Fresno project area. Additionally, the City will partner with the Fresno Regional Workforce Development Board Business Center to hold two business development workshops per year in the project area.

With respect to business stabilization and wealth building, the Transform Fresno project partners will gather and analyze data specific to local, minority-owned businesses in the project area, provide a complete data and research report, and conduct educational and informational community workshops for small businesses.

Displacement Avoidance Plan

Project Details

- » Launch date: September 2019
- » Anticipated completion date: March 2024
- » Project lead: Thrivance Group & City of Fresno
- » TCC grant funds: $0
- » Leveraged funds: $60,500

Progress Through FY 2019-2020

- » Anti-Displacement Task Force (ADTF) established in November 2018 – 11 members appointed by the Mayor
- » Stakeholders identified and prioritized DAP policies at a May 2019 workshop
- » Downtown Displacement Report informing the DAP was released in May 2019 by the City of Fresno Development and Resource Management Long Range Planning Division
- » Draft DAP Framework released in May 2019; final DAP presented to 64 community members in September 2019
- » Conducted a social climate analysis and started executive stakeholder interviews in June 2020
- » 2 ADTF meetings and 1 business development workshop held in June 2020
- » SGC awarded City of Fresno a $133,333 technical assistance grant for citywide displacement avoidance activities

Responses to COVID-19

- » Conducted all outreach, engagement, interviews, and policy analysis either virtually or by phone.
- » Starting in June 2020, the ADTF held virtual meetings (via Zoom), which were recorded and then shared on social media and CMAC TV.

Workforce Development Plan

Zero-emission Class 8 heavy-duty trucks, like that above, will be used to train residents for jobs in the clean transportation sector. Photo credit: California Air Resources Board

TRANSFORM FRESNO'S WORKFORCE DEVELOPMENT PLAN (WDP) funds the creation of a two unique training programs for Transform Fresno residents: West Fresno Advanced Transportation Technology Training (WFATT) and Voice of Including Community Equitably (VOICE) Gladiator Welding Pre-Apprenticeship Training. The WDP also funds the development of a citywide, comprehensive workforce development tool that the City of Fresno will use to track all workforce-related data.

West Fresno Advanced Transportation Technology Training (WFATT)

WFATT will recruit and train 200 qualified residents on the operation and maintenance of advanced clean truck technologies. The program will target project area residents, with 80% of enrollment from the 93706 (Southwest Fresno) and 93721 (Downtown and Chinatown) zip codes.

The services offered through WFATT include academic and career assessments, case management, supportive services, job readiness workshops, interview skills, vocational training, and job placement. Qualified participants complete 160 hours of classroom and field training in clean truck operation with the Fresno United Truck Driving School.

After completing the training and obtaining a Class A driver's license, WFATT will refer participants to employers that operate zero- and low-emission truck fleets and assist them in finding gainful employment in the trucking industry. The project goal is to place participants in full-time, high-quality jobs that provide competitive wages and benefits. The training program is expected to be completed in 2024.

The Fresno Regional Workforce Development Board (FRWDB) will serve as the plan lead for the WFATT by providing grant administration and oversight. FRWDB already oversees a suite of workforce development programs in the region that help place Fresno County residents in new jobs or gain new skills. These programs include career services, occupational skills and on-the-job training services, job placement assistance, supportive services, and job readiness and interview preparation workshops for adults, young adults, and dislocated workers.

Recent Accomplishments*

- 19 students enrolled in first cohort of the VOICE Gladiator Welding Pre-Apprenticeship Training Program
- 7 participants enrolled in Truck Driver Training at United Truck Driving School
- Purchased Low Emissions Commercial Truck
- Created electronic database and began collecting information regarding workforce data, green jobs, training programs and other relevant documents from the region

*Only includes accomplishments from last fiscal year (July '20-June '21)

VOICE Gladiator Welding Pre-Apprenticeship Training

The VOICE Gladiator Welding Pre-Apprenticeship Training Program will address underemployment challenges by focusing on building a workforce within West Fresno that has the skills to successfully enter gainful and sustainable employment with complete industry-recognized certifications. The program will also provide ongoing support and career coaching to assist with program retention. The program is free of charge to all who participate in the program. The project will recruit and train 108 qualified residents, primarily from the target area of the 93706, 93721, and 93727 ZIP codes. The training program is expected to be completed in 2024.

The State Center Community College District (SCCCD), Voice of including Community Equitably (V.O.I.C.E.), and West Fresno Family Resource Center have partnered to implement the training program. SCCCD administers the grant and helps obtain classroom space and training facilities. V.O.I.C.E. specializes in programming designed to increase participation in targeted populations by conducting outreach at nontraditional community settings, such as at local businesses, neighborhood events at schools or sports leagues, and events geared around the local community's culture. West Fresno Family Resource Center provides case management and mentorship work

Workforce Development Plan Online Tracking Tool

The City of Fresno has hired a workforce development consultant to conduct an economic analysis of workforce opportunities, evaluate existing workforce development programs and gaps, and synthesize findings and recommendations into a TCC Workforce Development Strategic Plan. The Plan will include executable strategies that incorporate feedback from industry, higher-ed institutions, non-profits and local government, while strengthening alignment with workforce providers. To align the Plan with TCC's goals and State priorities, the analysis will focus on workforce development opportunities for greenhouse-gas reducing careers and industry sectors.

Other workforce development, job training, and employment opportunities to be created include:

- Construction jobs to build an affordable housing development called The Monarch @ Chinatown (local hiring preference);
- Solar PV system installation and maintenance training with GRID Alternatives and Fresno EOC;
- Home weatherization and energy efficiency measures training with Fresno EOC;
- Food waste prevention and edible food rescue and distribution jobs at the St. Rest + Food to Share Hub;
- Workforce training, technical certificates and degree programs, and employment opportunities, which will be offered at the new West Fresno Satellite Campus;
- Agricultural training provided by Yosemite Village Permaculture Community Garden & Urban Farm Incubator

Workforce Development Plan

Project Details

- Launch date: June 2020
- Anticipated completion date: June 2024
- Project leads: City of Fresno, Fresno Regional Workforce Development Board, State Center Community College District, VOICE
- TCC grant funds: $3,209,932
- Leveraged funds: $316,685

Progress Through FY 2019-2020

- Executed subgrant agreement between the Fresno Area Workforce Investment Corporation and the City of Fresno in June 2020 to offer services through West Fresno Advanced Transportation Technology Training
- Developed subgrant agreements for the City of Fresno's comprehensive workforce data tracking tool and between the VOICE Gladiator Welding Pre-Apprenticeship Training Program and the City of Fresno

Responses to COVID-19

- Truck Driver Training was further delayed due to COVID-19
- Workforce Plan and online tool experienced some delay when consulting team members got COVID-19

PROFILES:
TCC FUNDED PROJECTS

Community members volunteer for the groundbreaking of the Yosemite Village Permaculture Community Garden and Urban Farm Incubator on October 1, 2019. Photo credit: Stan Morita

TCC APPLICANTS CHOSE FROM A WIDE ARRAY OF PROJECT TYPES in their effort to achieve the three objectives of TCC, namely: (1) reductions in GHGs; (2) improvements in public health and environmental benefits, and (3) expanded economic opportunity and shared prosperity. These project types align with the suite of California Climate Investments overseen by various state agencies.[9] 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 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 UCLA-UCB evaluation team) to estimate the benefits of each project. The following section provides an overview of the Transform Fresno projects, aggregated by project type, that will be using TCC dollars to achieve the aims of the program.

[9] For more information about California Climate Investments, visits: http://www.caclimateinvestments.ca.gov/

Active Transportation Project

An example of a Class II bicycle lane. Photo credit: Climate Central

THE ANNADALE MODE SHIFT will help make active transportation options more safe and convenient for the Transform Fresno community. The project plans to install approximately 1,154 linear feet of new sidewalk, 1,196 linear feet of Class II bicycle lanes, signage for 1,085 linear feet of Class III bike lanes, and street lighting on East Annadale Avenue between South MLK Jr. Boulevard and South Elm Avenue. The Annadale Mode Shift will close a gap of pedestrian path and improve connectivity along a street that links West Fresno Elementary and Middle Schools, the Mary Ella Brown Community Building, the Clinica Sierra Vista Health Center, and current and proposed affordable housing developments, including Annadale Commons. By shifting more trips out of cars and encouraging alternative modes of travel, the project will reduce traditional vehicle miles traveled, thereby reducing tailpipe GHG emissions. The project has been operational since July 2021.

Recent Accomplishments*

- Subgrant agreement approved by the City of Fresno
- Construction started in May 2021
- Curbs, gutters, sidewalks,bike lane signs, and striping completed by early June 2021.

* Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

Self-Help Enterprises serves as the lead partner for this project. Supporting partners include the City of Fresno Department of Public Works, which will provide long-term operations and maintenance of the improvements. Self-Help Enterprises will use leverage funds to conduct public outreach to educate residents and other community members on the transportation options, and to connect them with existing subsidy programs such as Taxi Scrip, Handy Ride, and other City of Fresno Transit programs.

Annadale Mode Shift

The Annadale Mode Shift will install approximately 14,070 square feet of sidewalk, approximately 1,196 linear feet of Class II bike lanes, and signage for approximately 1,085 linear feet of Class III bike lanes on East Annadale Avenue between South MLK Jr Boulevard and South Elm Avenue.

Project Details

» Launch date: April 2021
» Completion date: July 2021
» Project lifetime (post-implementation): 20 years
» TCC grant funds: $343,000
» Leveraged funds: $150,000
» Project lead: Self-Help Enterprises

Estimated Lifetime Benefits

» GHG emissions reductions: 41 MTCO2e
» VMT reductions: 111,511 miles
» Travel cost savings: $62,114
» Direct jobs from TCC dollars: 2 FTEs
» Indirect jobs from TCC dollars: 1 FTE
» Induced jobs from TCC dollars: 1 FTE

Progress Through FY 2019-2020

» Subcontractor agreement between Self-Help Enterprises and the City of Fresno Department of Public Works for construction and maintenance services in development.

Responses to COVID-19

» Self-Help Enterprises will conduct virtual public outreach to educate residents and community members on active transportation options and to connect them with existing subsidy programs such as Taxi Scrip, Handy Ride, and other City of Fresno transit programs.

Affordable Housing and Sustainable Communities Project

Architectural rendering of the Chinatown apartment complex. Photo credit: GGLO Design

TRANSFORM FRESNO WILL FUND the construction of a 57-unit mixed-use affordable housing development called The Monarch @ Chinatown.[10] The high-density, four-story development will include 4,695 square feet of ground floor retail space, as well as a below-ground parking garage. The project will consist of 56 affordable workforce housing units and one manager's unit. The project has varying levels of income-restrictions: 15 units will be rented to households with incomes at or below 30% of the area median income (AMI), 14 units will be rented to households earning at or below 50% of the AMI, and 27 units will be reserved for households earning at or below 60% of the AMI. Additional amenities include on-site resident services, a computer room, an exercise room, a community room, a tot-lot, solar panels, electric vehicle charging stations, and bike storage lockers. Since the project site is located on 0.60 acres of vacant land, it will not directly displace Chinatown residents or businesses. Project partners anticipate the affordable housing units will be available for occupancy in Fall 2022.

Recent Accomplishments*

- Held virtual groundbreaking event on September 9, 2020
- 56 affordable housing units under construction
- 40 people provided input on the project implementation
- 1 Community Engagement event held

*Only includes accomplishments during the last fiscal year (July 2020 through June 2021).

[10] For a definition of affordable, see Appendix A of the FY 2017-'18 AHSC Program Guidelines.

In addition to the investment in affordable housing stock, this project will offer 56 free transit passes per year for residents (one for each affordable unit) for three years. To further encourage the use of public transit and active transportation, the project plans to complete three sustainable transportation improvements (STI) alongside the affordable housing development.

» STI #1 (ATP) will improve active transportation access to a transit stop located on F and Tulare streets by installing LED streetlights on F Street and making improvements to 0.5 miles of paved pedestrian facilities surrounding the apartment development

» STI #2 (UG) will plant 26 trees on F Street from Fresno to Mariposa streets to increase canopy cover in Chinatown. A parklet and irrigation systems will also be installed within these limits.

» STI #3 (UG) will reconstruct China Alley between Kern and Inyo streets into a permeable green alley and install strand lighting to increase visibility (the remaining part of China Alley will be reconstructed under the "Chinatown Urban Greening" project between Tulare and Kern Streets and between Inyo and Ventura Streets). Signage and other traffic calming surface improvements will be included as well.

The Monarch @ Chinatown will be constructed by the Fresno Housing Authority, which is the project's lead partner. GGLO Design and Johnston Contracting serve as architectural and construction subcontractors. Other partners include US Bank, the California Housing Finance Agency, and the Department of Housing and Community Development. The City of Fresno will provide long-term operations and maintenance for the STI projects.

The Monarch @ Chinatown

The Monarch @ Chinatown is a four-story infill housing community that will create 57 units of quality, affordable housing, and approximately 4,700 square feet of mixed-use commercial space in heart of Chinatown. The new housing development will eliminate a blighted parcel of vacant land to provide much-needed revitalization.

Project Details

» Launch date: September 2020

» Anticipated completion date: Fall 2022

» Project lifetime (post-implementation): 30 years

» TCC grant funds: $11,785,221

» Leveraged funds: $26,862,085

» Project lead: Fresno Housing Authority

Estimated Lifetime Benefits

» GHG emissions reductions: 5,345 MTCO2e

» VMT reductions: 14,170,461 miles

» Travel cost savings: $5,257,152

» Direct jobs from TCC dollars: 56 FTEs

» Indirect jobs from TCC dollars: 30 FTE

» Induced jobs from TCC dollars: 4 FTE

Progress Through FY 2019-2020

» Property acquired in January 2018

» The Monarch @ Chinatown secured all leveraged funding by February 2020, including an Infill Infrastructure Grant, HOME program funding through the City of Fresno, a 4% CTCAC award, and funding from the California Energy Commission

Responses to COVID-19

» The project continues to move forward following COVID-19 safety protocols.

» COVID-19 continues to challenge community engagement efforts.

» The plan approval process and ability to reach key personnel were severely impacted by the pandemic and the City of Fresno moving to electronic-only plan submissions.

Food Waste Prevention and Rescue Project

A volunteer helping with Fresno Metro Ministry's Food to Share program. Photo credit: Fresno Metro Ministry

THE FOOD WASTE PREVENTION AND RESCUE PROJECT, called the St. Rest + Food to Share Hub: Healthy Food Rescue and Redistribution, will provide access to fresh, local and healthy food for Transform Fresno residents at the former Farmer John Meat Co. The warehouse will be renovated and repaired to accommodate modern dry and cold storage facilities, an operations office, and a central food donation and distribution space. A new two-story structure next to the warehouse expands the project and will contain a community commercial kitchen, classrooms, and community service offices. The Hub will be located on the Saint Rest Baptist Church campus, near the intersection of East Reverend Chester Riggins and South Elm avenues.

The Hub project will significantly expand the rescue, sorting, storage, and distribution capacity of Fresno Metro Ministry's existing Food to Share program. This community partnership rescues off-farm edible food waste, collects food donations from businesses, restaurants, schools, and markets, and delivers recovered food to local pantries, kitchens, churches, and hunger-fighting organizations.

Recent Accomplishments*

- Subgrant agreement with the City of Fresno approved in March 2021;
- Hosted site visit and tour which resulted in $255,000 additional investments, and invitations to apply for additional funding;
- Completed renderings for a new two-story building with a Community Commercial Kitchen, Classrooms, and Community Service Offices

* Only includes accomplishments during the last fiscal year (July 2020 through June 2021).

The Food to Share Hub reduces GHG emissions by diverting edible food from landfills, where the organic materials would release methane as they decomposed. The project also addresses food insecurity and hunger in the project area by providing a location to distribute healthy food directly to families and individuals in need on a continuous, year-round basis.

In addition to the physical building improvements and expanded food rescue and redistribution capacity, the renovated Food to Share Hub will offer community-focused programming. The commercial kitchen space will be open to the public for cooking skills and nutrition education classes. These classes will cover topics such as food preparation, shopping on a budget, and the connection between food, health, and wellness using the nationally recognized Cooking Matters curriculum.

Saint Rest Baptist Church will coordinate monthly food giveaways at the Hub, along with regular community events and activities that elevate the importance of health, education, exercise, and resilience.

A Community Advisory Committee will be established to advise this project on all aspects of community engagement, activities programming, event planning, and identifying additional community services that can be provided at the Hub site.

The warehouse project is expected to be operational in August 2022, and the new building by May 2023. Fresno Metro Ministry is the lead partner for this project, and Saint Rest Baptist Church serves as the project co-lead. Paul Halajian Architects designed the site plans for the Hub renovation. Fresno Metro Ministry and St. Rest will manage long-term operations and maintenance of the Food to Share Hub.

St. Rest + Food to Share Hub: Healthy Food Rescue and Redistribution

The St. Rest + Food to Share Hub: Healthy Food Resource and Redistribution Hub will result in an annual recovery of over 1 million pounds of nutritious food, that would otherwise be wasted, and distribute it to families experiencing food hardship.

Project Details

» Launch date: March 2021
» Anticipated completion date: August 2022
» Project lifetime (post-implementation): 10 years
» TCC grant funds: $1,488,280
» Leveraged funds: $3,855,922
» Project lead: Fresno Metro Ministry

Estimated Lifetime Benefits

» GHG emissions reductions: 9 MTCO2e
» Material diverted from landfill: 31 tons
» Direct jobs from TCC dollars: 16 FTEs
» Indirect jobs from TCC dollars: 4 FTE
» Induced jobs from TCC dollars: 7 FTE

Responses to COVID-19

» Food Hub project helps mitigate food access barriers exacerbated by COVID-19

Low Carbon Transportation Project

An example of electric vehicle charging stations located at the Kearney Palms shopping mall in the Transform Fresno project area. The Clean Shared Mobility Network will install additional charging stations throughout Downtown, Chinatown, and for the electric vehicles in the car sharing, vanpool, and ride-sharing network. Photo credit: EVgo

THE PROJECT WILL ESTABLISH new electric vehicle (EV) car sharing, vanpool, ride-sharing, and bicycle sharing programs collectively named the Clean Shared Mobility Network (CSMN). Together, these programs will provide low- to no-cost mobility services throughout the project area. The car share network will consist of 34 battery-electric vehicles (Tesla Model 3 or Chevy Bolt) that can be rented by the hour or by the day, with below-market rates for low-income members. The car share network includes a rural vanpool consisting of eight battery-electric vehicles that will transport residents to and from employment centers. The bike share will consist of 200 electric bicycles and approximately 300 docking stations at hubs across Downtown, Chinatown, and Southwest Fresno. The project will offer vouchers to individuals and households to reduce the economic burden of accessing and using these low carbon mobility options. The CSMN will assist residents in getting to school, work, and healthcare appointments, while generating new growth for the local business community. The project is expected to be operational in 2024.

Recent Accomplishments*

- Added a Community Engagement Consultant to hold meetings and a series of conversations with community leaders on climate resiliency, transportation and economy
- 38 EV chargers installed for the electric vehicle carshare network

* Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

In addition to the investment in new electric vehicles, bicycles, and vouchers to keep the car and bike share costs affordable, Transform Fresno TCC dollars will also fund the following:

» Installing EV charging infrastructure for the 42 vehicles. This includes approximately 34 Level 2 electric vehicle supply equipment (EVSE) chargers for the car share vehicles, and approximately eight Level 3 EVSE chargers for the vanpool vehicles.

» Creating a physical location for engaging with the program, called the Mobility Hub Customer Service Center. The Mobility Hub will have multimodal trip information displays and refillable trip card machines.

» Establishing a volunteer driver program that will provide rides to underserved residents

» Developing an integrated services web platform and phone/tablet application

The Fresno Metro Black Chamber Foundation serves as the lead partner for this project, and will develop a long-term operations and maintenance plan for the system during the first year of the grant term. Supporting partners include TDH Associates International, Shared Use Mobility Center, Green Commuter, Bethel Temple Early Readers Preschool, Shared Mobility, Inc., San Joaquin Valley Latino Environmental Advancement and Policy (Valley LEAP), and the Fresno Housing Authority. The Fresno Career Development Institute has been contracted to support the Community Engagement efforts associated with the project. A vanpool operator will support the project in future years.

Clean Shared Mobility Network

The Clean Shared Mobility Network will establish a low carbon transit system of electric vehicle and bicycle shares, to provide low- or no-cost services throughout the Project Area and will include an EV car share with below-market rates for lower-income members.

Project Details

» Launch date: September 2020

» Anticipated completion date: April 2024

» Project lifetime (post-implementation): 3 years

» TCC grant funds: $7,717,014

» Leveraged funds: $2,292,900

» Project lead: Fresno Metro Black Chamber Foundation

Estimated Lifetime Benefits

» GHG emissions reductions: 1,446 MTCO2e

» Direct jobs from TCC dollars: 37 FTEs

» Indirect jobs from TCC dollars: 15 FTE

» Induced jobs from TCC dollars: 23 FTE

Progress Through FY 2019-2020

» Subgrant agreement with the City of Fresno executed in November 2019

» FMBCF successfully negotiated seven subcontractor agreements with consultants and vehicle operators in March 2020

Rooftop Solar and Energy Efficiency Projects

A Fresno EOC crew installs solar panels on a single-family home. Photo credit: Fresno EOC

TRANSFORM FRESNO'S solar and energy efficiency projects will collectively install up to 340 kW of solar photovoltaic (PV) panels on affordable multifamily housing developments and single-family properties owned by low-income households (see Table 3 for a complete list of projects). The projects are led collectively by GRID Alternatives and Fresno EOC. Each project includes workforce development and community engagement activities targeted toward residents in the project area. The solar and energy efficiency projects aim to reduce emissions while providing direct economic benefits for local families by reducing their electrical utility costs.

GRID Alternatives is a nonprofit organization that installs solar power systems and provides job training for underserved communities throughout California. GRID Alternatives will install solar on five multifamily buildings and 60 single-family homes in Southwest Fresno. All of the project beneficiaries will be low-income families falling below 80% of the AMI in the TCC project area.

Fresno EOC is a locally based nonprofit agency (specifically, a Community Action Agency per the U.S. Economic Opportunity Act of 1964). The organization provides programming and services in the areas of youth and adolescent education, housing and shelter, food and nutrition, community health and preventive care, financial literacy, energy conservation, vocational counseling and training, and job placement. Fresno EOC will install energy efficiency measures on 170 single-family homes in Southwest Fresno, and install solar photovoltaic systems on 135 single-family homes throughout the TCC project area.

Recent Accomplishments*

EOC Partnership

- 17 homes approved for solar PV and 13 solar PV systems installed (55 kW)
- 7 people provided commentary or input on project
- 23 households approved for and 6 households received energy efficiency measures
- 3 outreach events attended to promote energy efficiency and solar PV systems
- 2 individuals trained in energy efficiency measures and solar PV maintenance

GRID Solar Collaborative Single-Family and Multi-Family Partnerships

- 63 individuals trained in solar PV maintenance and energy efficiency measures
- 16 single-family solar PV systems (29 kW) serving 64 people
- 1 multi-family installation planned for December 2021

* Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

Training a Solar and Energy Efficiency Workforce

GRID Alternatives will target 200 TCC area individuals for on-the-job and classroom training for residents who are interested in a career in the solar sector. The training will be conducted by GRID Alternatives, which provides trainees with direct installation skills, as well as job safety and basic electrical skills. GRID Alternatives will partner with the Fresno Center for New Americans and Stone Soup Fresno to host monthly energy efficiency workshop classes and community outreach activities on solar qualification, training opportunities, and educating the community on energy efficiency and consumer behaviors that save money on electrical utility bills. GRID Alternatives will also provide technical support during the post-installation warranty period, and the project is expected to be completed in 2021.

Fresno EOC's Local Conservation Corps, along with the subcontractor GHS Govans, will have trainees and crews who reside in the Transform Fresno project area. Fresno EOC will provide on-the-job training and classroom training at the Solar Training Lab located at Fresno EOC's Neighborhood Youth Center. Approximately six trainees will attend a three-day training and certification with SunPower, a company that develops solar power systems and offers trainings to accredit solar installers. Fresno EOC will perform community outreach to identify qualified homes for energy efficiency and solar measures, and provide energy conservation education to residents. Fresno EOC and GRID Alternatives will coordinate their outreach and installation plans. Fresno EOC will provide technical support to homeowners during the post-installation warranty period, and the project is expected to be completed in 2023.

EOC Partnership for Energy Savings & Greenhouse Gas Reductions in SW Fresno

EOC Partnership for Energy Savings and GHG Reductions in SW Fresno will install energy efficiency and solar water heating measures on 170 single-family homes in Southwest Fresno. The project will also assess, design, and install 510,000 watts of solar photovoltaic systems on 135 single-family homes in the TCC Project Area. Fresno EOC will provide on the job training and Sun Power certification of crews from the target area. Fresno EOC and GRID Alternatives will coordinate their outreach and installation plans.

Project Details

» Launch date: May 2019
» Anticipated completion date: July 2023
» Project lifetime: 30 years
» TCC grant fund: $3,208,377
» Leveraged funds: $0
» Project lead: Fresno Economic Opportunities Commission (Fresno EOC)

Estimated Lifetime Benefits

» GHG emissions reductions: 7,736 MTCO2e
» Renewable energy generation: 23,941,080 kWh
» Energy cost savings: $3,198,528
» Direct jobs from TCC dollars: 17 FTEs
» Indirect jobs from TCC dollars: 7 FTE
» Induced jobs from TCC dollars: 12 FTE

Progress Through FY 2019-2020

» 45 households approved for and 22 households received energy efficiency measures
» 9 homes approved for solar PV and 6 solar PV systems installed (28.13 kW)
» 9 community events and outreach events held, with 7 people providing input on project implementation
» 24 individuals trained in energy efficiency measures and solar PV maintenance

Responses to COVID-19

» Safety guidelines added additional challenges to providing in-home installation of energy efficiency measures.
» Resumed services in 2021, but closed or suspended some project activities due to COVID-19 related concerns

GRID Solar Collaborative Single-Family Partnerships

The GRID Solar Collaborative Multi-Family Partnership project will install 183 kW of solar photovoltaic (PV) panels on 60 Single-Family homes in the project area. GRID Alternatives will also host monthly efficiency workshop classes and community outreach activities on solar qualification, training, opportunities, and educating the community on energy efficiency and consumer behaviors that save money on electricity bills.

Project Details

» Launch date: April 2019
» Anticipated completion date: July 2023
» Project lifetime: 30 years
» TCC grant fund: $883,826
» Leveraged funds: $535,808
» Project lead: GRID Alternatives

Estimated Lifetime Benefits

» GHG emissions reductions: 2,355 MTCO2e
» Renewable energy generation: 8,590,620 kWh
» Energy cost savings: $1,147,707
» Direct jobs from TCC dollars: 5 FTEs
» Indirect jobs from TCC dollars: 2 FTE
» Induced jobs from TCC dollars: 3 FTE

Progress Through FY 2019-2020

» 16 single-family solar PV systems (72.00 kW) installed, directly serving 64 people
» 32 individuals trained in solar PV maintenance (GRID Alternatives training facility)
» 14 outreach events and energy efficiency workshops held (14 in English, 3 in Spanish, and 2 in Hmong)
» 125 single-family visits conducted
» 8 volunteers participated in project implementation

Responses to COVID-19

» Developed written protocols, incorporated social distancing markers into the facility, implemented sanitation protocols, and limited class sizes to 6 trainees per cohort.
» Maintained a modified work schedule with partial on-site work allowed in the training department.
» On-site training in direct solar installation is still prohibited and the incorporation of volunteer trainees is restricted as well.
» Increased attention on installation permits due to slower processing times

GRID Solar Collaborative Multi-Family Partnership

The GRID Solar Collaborative Multi-Family Partnership project will install 91 kW of solar photovoltaic (PV) panels on 5 affordable multifamily housing units operated by the Fresno Housing Authority. The project aims to improve air quality and provide direct economic benefit for West Fresno families through electrical utility cost savings.

Project Details

» Launch date: April 2019
» Anticipated completion date: July 2023
» Project lifetime: 30 years
» TCC grant fund: $352,549
» Leveraged funds: $110,000
» Project lead: GRID Alternatives

Estimated Lifetime Benefits

» GHG emissions reductions: 1,048 MTCO2e
» Renewable energy generation: 3,559,475 kWh
» Energy cost savings: $475,546
» Direct jobs from TCC dollars: 2 FTEs
» Indirect jobs from TCC dollars: 1 FTE
» Induced jobs from TCC dollars: 1 FTE

Progress Through FY 2019-2020

» 1 multifamily system (20.74 kW) installed
» 68 people served by the multifamily project
» 8 volunteers participated in project implementation
» 4 multifamily site visits conducted

Responses to COVID-19

» Followed COVID-19 prevention protocols,established social distancing

Urban and Community Forestry Projects

Hoop house at the Yosemite Village Permaculture Community Garden & Urban Farm Incubator, which was constructed in March 2021. Photo credit: Chris De León

Trees, Community Gardens, and Open Green Space

The four Urban and Community Forestry (UCF) projects will complement other efforts throughout the neighborhood to increase resident access to tree coverage, healthy food, and open green space. Together the projects will plant over 500 trees along sidewalks, in street medians, in park strips, in existing parks, and in newly constructed community gardens and orchards. As the trees mature, they will reduce GHGs by sequestering carbon and by cooling nearby buildings, which should reduce the demand for electricity on hot days.

The shade cover from increased tree canopy can encourage more active forms of transportation, such as walking and biking. Many of these trees will also increase healthy and nutritious food access for residents. For example, the Yosemite Village Community Orchard will plant 120 citrus, stone fruit, and nut trees. The Inside Out Community Garden and Yosemite Village Permaculture Community Garden and Urban Farm Incubator projects will predominately plant fruit trees.

Recent Accomplishments*

Southwest Urban Forest Expansion
- 305 trees planted to complete original project
- 100 extra trees will be planted in project area

Inside Out Community Garden
- 5 cooking demonstrations used garden harvest
- 4 planting workshops and 4 community engagement events
- 2 summer fellows from Cal CAC supported enrichment program

Yo'Ville Permaculture Community Garden & Urban Farm Incubator
- 62,300+ square feet of vegetation planted
- 200+ native pollinator plants planted
- 96 planting days with 104 volunteers
- 10 multilingual informational presentations and tabling events engaged 399 stakeholders
- 6 Garden Leadership Committee meetings

Yosemite Village Community Orchard
- Signed project agreement in March 2021
- Began engaging community in visioning process

* Includes accomplishments from last fiscal year (July 2020 - June 2021)

The UCF projects will utilize environmentally and water-friendly practices in vegetable and produce plots. The Yosemite Village Community Garden and Community Orchard projects will incorporate organic and permaculture techniques including non-mechanical, no-till, no-spray methods, landscaped bioswales, rainwater capture features, and on-site composting. Similarly, the Inside Out Community Garden will use organic soil, non-genetically modified seeds, drip irrigation and create a composting area.

The three community garden and orchard projects provide residents the opportunity to garden, grow, and harvest their own fruits and vegetables. These projects will also include design elements to encourage community use, such as walking paths, benches, picnic tables, and shade areas. Together, the projects benefit the community by providing healthy and nutritious food options while promoting carbon sequestration and water conservation.

Community Engagement and Education

Community engagement, input, partnership, and education are integral parts of UCF project implementation. For instance, the City of Fresno partnered with Tree Fresno and other nonprofits to educate volunteers on proper tree planting techniques throughout the Southwest Urban Forest Expansion. Fresno Metro Ministry is working to increase community awareness and knowledge on garden and orchard management through on-site experiential learning opportunities at the Yosemite Village site.

Fresno Metro Ministry will partner with the Youth Leadership Institute and the Fresno Housing Authority to conduct multicultural, multi-generational, and multilingual outreach to residents and community members, encouraging engagement in the community garden and orchard project programming. The project partners hold volunteer planting days, nutrition, and cooking classes, and established a small farmer incubator for gardeners to sell their produce to the community. The Inside Out Community Garden, with support from Fresno EOC and Another Level Training Academy, plans to hold weekly community harvesting events, monthly outreach and community events, and provide healthy food education through live cooking demonstrations.

The UCF projects is leveraging community partnerships and engagement in long-term tree care and garden maintenance. The City of Fresno Department of Public Works will care for trees planted under the Southwest Urban Forest Expansion, and support Fresno EOC with tree care for the Inside Out Community Garden. The Yosemite Village projects has established a resident-based Garden Leadership Committee that will manage the garden's operations and maintenance in conjunction with Fresno Metro Ministry.

Southwest Urban Forest Expansion

The Southwest Urban Forest Expansion project planted 305 trees along existing sidewalks, in street medians, park strips, and parks in southwest Fresno. The planting locations in the original project plan include: Jensen Median from 41st to MLK (35 trees), Elm Medians from Ventura to Jensen (80 trees), Fruit and Jensen Buffer (150 trees), Tupman Park (15 trees), and Chandler Park (15 trees). Due to cost savings, the project will plant 100 additional trees in the project area in 2022. The City of Fresno Department of Public Works will provide long-term maintenance on all trees and collaborate with the local Urban Forester as needed.

Project Details

» Launch date: April 2019
» Anticipated completion date: December 2022
» Project lifetime (post-implementation): 40 years
» TCC grant funds: $212,199
» Leveraged funds: $0
»Project Lead: City of Fresno

Estimated Lifetime Benefits

» GHG emissions reductions: 521 MTCO2e
» Trees planted: 295
» Avoided stormwater runoff: 1,328,532 gallons
» Direct jobs from TCC dollars: 2 FTEs
» Indirect jobs from TCC dollars: 0.3 FTE
» Induced jobs from TCC dollars: 1 FTE

Inside Out Community Garden

The Inside Out Community Garden project will build a community garden at Sunset Community Center that will include site preparation, garden construction and planing, volunteer recruitment, and community engagement on garden maintenance, harvesting, and cooking demonstrations. The garden will include fruit trees, an ADA accessible planter box, benches, a tool shed, and composting box.

Project Details

» Launch date: April 2019
» Anticipated completion date: March 2024
» Project lifetime (post-implementation): 40 years
» TCC grant funds: $98,000
» Leveraged funds: $0

Estimated Lifetime Benefits

» GHG emissions reductions: 1 MTCO2e
» Trees planted: 5
» Avoided stormwater runoff: 9,275 gallons
» Direct jobs from TCC dollars: 1 FTEs
» Indirect jobs from TCC dollars: 0.2 FTE
» Induced jobs from TCC dollars: 0.4 FTE

Progress Through FY 2019-2020

» Project kickoff and Clean Air Day events held in October 2019
» 5 fruit and citrus trees and 22.5 square feet of native plants planted
» 150 square feet of permeable surfaces installed, including an ADA accessible pathway
» 6 cooking demonstrations with recipes from the garden harvests held

Responses to COVID-19

» The inside Out Community Garden was closed to the public until March 2021.
» Cooking demonstrations were conducted virtually.
» Project held food giveaways in May and June of 2020.

Yosemite Village Permaculture Community Garden & Urban Farm Incubator

The Yosemite Village Permaculture Community Garden & Urban Farm Incubator project will develop a resident-led community garden and urban green space in Southwest Fresno behind the 69-unit Yosemite Village Housing Complex. The 7-acre site is less than 150 yards from the designated California Avenue BRT corridor. The project will incorporate organic and permaculture techniques including non-mechanical, no-till, no-spray methods that promote carbon sequestration and water conservation.

Project Details

» Launch date: April 2019
» Anticipated completion date: March 2024
» Project lifetime (post-implementation): 40 years
» TCC grant funds:$367,500
» Leveraged funds: $434,153

Estimated Lifetime Benefits

» GHG emissions reductions: 254 MTCO2e
» Trees planted: 90
» Avoided stormwater runoff: 453,576 gallons
» Direct jobs from TCC dollars: 4 FTEs
» Indirect jobs from TCC dollars: 1 FTE
» Induced jobs from TCC dollars: 2 FTE

Progress Through FY 2019-2020

» Project broke ground in October 2019
» 94 new garden plots and 3 new farms established
» 90 trees and 463 native plants planted
» 26,650 square feet of permeable surface installed
» 4 planting days with 28 volunteers
» 6 Garden Leadership Committee meetings
» 1 tree and vegetation maintenance training and 1 Youth Leadership Initiative event held, which resulted in 19 residents and 8 youth leaders trained
»»12 multilingual informational presentations held with 158 stakeholders engaged

Responses to COVID-19

» The Yosemite Village Community Garden has remained open on certain days and times to residents and the Garden Leadership Committee throughout the pandemic. Residents can sign up to volunteer at the site and to reserve a garden plot, while practicing safe social distancing and wearing masks.
» Resident outreach for engagement was conducted remotely through mailers, zoom presentations, phone banking, and social media recruitment.

Southwest Fresno Community Food Hub: Community Orchard

The Southwest Fresno Community Food Hub: Community Orchard project will construct a 0.73-acre community orchard and bio swales at the Yosemite Village Permaculture Garden, expanding their community garden to host a community orchard as well. Fresno Metro Ministry will plant over 120 citrus, stone fruit, and nut trees and manage the orchard using organic and biodynamic practices.

Project Details

» Launch date: February 2021
» Anticipated completion date: March 2024
» Project lifetime (post-implementation): 40 years
» TCC grant funds:$262,500
» Leveraged funds: $0

Estimated Lifetime Benefits

» GHG emissions reductions: 23 MTCO2e
» Trees planted: 120
» Avoided stormwater runoff: 381,033 gallons
» Direct jobs from TCC dollars: 3 FTEs
» Indirect jobs from TCC dollars: 1 FTE
» Induced jobs from TCC dollars: 1 FTE

Responses to COVID-19

» Resident outreach for engagement was conducted remotely through mailers, zoom presentations, phone banking, and social media recruitment

Urban Greening Projects

A tree being planted through the Urban Greening Program. Photo credit: California Climate Investments

Trees, Bike Lanes, and Open Green Space

The six Urban Greening (UG) projects will complement other efforts throughout the neighborhood to increase resident access to tree coverage, active transportation infrastructure, and open green space and recreation areas (see pages 61-63 for a complete project details). Together the projects will plant nearly 950 trees along sidewalks, street medians, and in parks. As the trees mature, they will reduce GHGs by sequestering carbon and by cooling nearby buildings, which should reduce the demand for electricity on hot days.

UG projects place an emphasis on increasing bicycle and pedestrian connectivity between other TCC funded projects and neighborhood amenities such as transit stops, schools, parks, hospitals and health clinics, banks, churches, and grocery stores.

For example, the Southwest Fresno Trail plans to install a new Class I multiuse trail along the Fanning Ditch alignment, while the Chinatown Urban Greening and the Park at MLK Magnet Core projects will make improvements to sidewalks and pedestrian facilities. The West Fresno Satellite Campus will construct about one mile of walking paths and one mile of Class II bicycle lanes on-site and surrounding the development. Each of the six UG projects also plans to install street, path, and trail lighting to make biking and walking safe and convenient options for the community.

Recent Accomplishments*

Southwest Fresno Trail

» Design consultant selection pending

Chinatown Urban Greening

» 30% design plans produced; 60% plans in process

» 1 community engagement event held

Mariposa Plaza

» 2 meetings held with 32 stakeholders engaged

» 30% design plans produced, 60% plans in process

Park at MLK Magnet Core

» Developed preliminary project schedule

St. Rest + Food to Share Hub: Urban Heat Island Mitigation Project

» Grant approved in March 2019

» Held launch event with 60 stakeholders, including Fresno mayor and city council member

Fresno City College

» Began site work and preparation for installation of bio-swales, pedestrian and bicycle pathways

* Includes accomplishments from last fiscal year (July 2020 - June 2021)

Several UG projects will improve public access to open green space and recreation areas. These projects also utilize environmentally and water-friendly practices in landscaping and park design. Mariposa Plaza will install permeable paving, a rainwater capture pavilion and irrigation system, and drought-tolerant shrubs and plants. The new 9.5-acre Park at MLK Magnet Core will have low-water use plantings, irrigation systems, and an open field layout that reduces flood risks by eliminating stormwater runoff. The St. Rest + Food to Share Hub project will have permeable surfaces, native and drought-tolerant trees, landscaping, and plants, and a rainwater collection basin and cistern system to recharge property wells and be used for irrigation. Finally, the West Fresno Satellite Campus will meet multi-objective stormwater goals through drought-tolerant landscaping, permeable paving, bioretention basins, and a central water feature with a stormwater capture and conservation function.

Community Engagement and Education

The UG projects integrate community engagement and educational components. For both the Southwest Fresno Trail and Chinatown Urban Greening projects, the US Green Building Council of Central California (USGBC-CC) is partnering with the City of Fresno to implement a section of the Transform Fresno Community Engagement Plan.

USGBC-CC will conduct a bicycle trail design outreach process and a bicycle education program, designed to raise bicycle safety awareness and encourage a mode shift while gathering input on community needs. Additionally, Fresno City College has hosted a series of community discussions regarding the West Fresno Satellite Campus. This was done to solicit feedback on the proposed project. Through these outreach efforts, the community members were able to express their concerns, preferences, and needs related to project implementation.

The UG projects also leverage community partnerships in long-term tree care and garden maintenance. The City of Fresno Department of Public Works will provide long-term operations and maintenance for tree plantings and trail and park improvements made under the Southwest Fresno Trail, Chinatown Urban Greening, Mariposa Plaza, and Park at MLK Magnet Core projects. The lead project partners for the St. Rest +Food to Share Hub (Fresno Metro Ministry) and West Fresno Satellite Campus (SCCCD) will manage the long-term operations and maintenance for the landscaping, urban greening, and stormwater reduction improvements made throughout these projects.

Southwest Fresno Trail

The Southwest Fresno Trail project will install a Class I Trail along the Fanning Ditch Alignment, from West to Thorne. The project will also plant 102 trees and landscaping to increase the urban tree canopy and add trail and street lighting facilities.

Project Details

» Launch date: April 2019
» Anticipated completion date: Summer 2023
» Project lifetime (post-implementation): # years
» TCC grant funds: $1,978,959
» Leveraged funds: $0
»Project Lead: City of Fresno

Estimated Lifetime Benefits

» GHG emissions reductions: 232 MTCO2e
» VMT reduction: 148,180 pedestrian miles
» Trees planted: 102 trees
» Avoided stormwater runoff: 506,992 gallons
» Travel costs savings: $80,017
» Direct jobs from TCC dollars: 7 FTEs
» Indirect jobs from TCC dollars: 3 FTE
» Induced jobs from TCC dollars: 8 FTE

Responses to COVID-19

» All meetings with stakeholders and other project partners have been virtual; however, virtual meetings have added challenges to coordination.

Chinatown Urban Greening

The Chinatown Urban Greening project will install improvements to paved pedestrian facilities in Chinatown, improving active transportation and connections to the adjacent planned High Speed Rail Station. Lighting and greening improvements will also be installed. The proposed improvements are located on: F from Mariposa to Ventura, Kern from G Street and Mariposa from E Street to G Street. This project achieves several goals of the TCC Program including: reducing greenhouse gas emissions through carbon sequestration, installing facilities that encourage active travel, and increasing the urban tree canopy.

Project Details

» Launch date: July 2019
» Anticipated completion date: Summer 2023
» Project lifetime (post-implementation): # years
» TCC grant funds: $6,965,696
» Leveraged funds: $0
» Project Lead: City of Fresno

Estimated Lifetime Benefits

» GHG emissions reductions: 442 MTCO2e
» VMT reduction: 19,080 pedestrian mile
» Trees planted: 248 trees
» Avoided stormwater runoff: 1,231,487 gallons
» Travel costs savings: $11,066
» Direct jobs from TCC dollars: 27 FTEs
» Indirect jobs from TCC dollars: 13 FTE
» Induced jobs from TCC dollars: 25 FTE

Progress Through FY 2019-2020

» Subgrant agreement with the City of Fresno executed in July 2019
» Request for Qualifications posted for a design consultant in September 2019
» Consultant agreement executed in 2020 with Dewalt Corporation

Responses to COVID-19

» Projects conducted all community outreach through virtual meetings and social media.

Mariposa Plaza

The Mariposa Plaza project refreshes a significant downtown plaza and enhances its connection to the future High Speed Rail station. Renovations will include tree planting, landscaping, installation of permeable paving, and a rainwater capture pavilion. It will maintain its historic use as a place for public speaking and community events. Other improvements such as the addition of public artwork and canopies for shade cement the cultural significance of the area while keeping the plaza flexible for a wide range of public events.

Project Details

» Launch date: April 2019
» Anticipated completion date: Fall 2023
» Project lifetime (post-implementation): # years
» TCC grant funds: $3,859,000
» Leveraged funds: $0
»Project Lead: City of Fresno

Estimated Lifetime Benefits

» GHG emissions reductions: 15 MTCO2e
» Trees planted: 8 trees
» Avoided stormwater runoff: 34,851 gallons
» Energy cost savings: $4,632
» Direct jobs from TCC dollars: 25 FTEs
» Indirect jobs from TCC dollars: 7 FTE
» Induced jobs from TCC dollars: 19 FTE

Progress Through FY 2019-2020

» Statements of Qualifications received in September 2019 for a design consultant
» Consultant agreement executed in March 2020 with Wallace, Roberts & Todd
» Project kickoff event held in May 2020
» 2 stakeholder meetings held with 11 people engaged

Responses to COVID-19

» Conducted community outreach and engagement through virtual meetings and social media.
» When COVID restrictions were lifted, Art-Hop and other events hosted by the Downtown Fresno Partnership (PBID) attracted and continue to attract many community members to the plaza, which has reinforced the need for the project.

Park at MLK Magnet Core

The Park at MLK Magnet Core project will design and construct a new approximately 9.5 acre public park in the center of a planned residential development adjacent to the new West Fresno Satellite Campus, on the west side of MLK Jr. Boulevard between Church and Jensen Avenues. The TCC grant will fund the design phase, property acquisition, and park construction which will include landscaping of 100 trees, low water use plantings, a walking path, irrigation, restroom, site furnishings, and utilities infrastructure.

Project Details

» Launch date: April 2019
» Anticipated completion date: March 2024
» Project lifetime (post-implementation): # years
» TCC grant funds: $5,489,606
» Leveraged funds: $1,500,000
» Project Lead: City of Fresno

Estimated Lifetime Benefits

» GHG emissions reductions: 275 MTCO2e
» Trees planted: 100 trees
» Avoided stormwater runoff: 468,206 gallons
» Direct jobs from TCC dollars: 37 FTEs
» Indirect jobs from TCC dollars: 9 FTE
» Induced jobs from TCC dollars: 26 FTE

St. Rest + Food to Share Hub: Urban Heat Island Mitigation Project

The St. Rest and Food to Share Hub: Urban Heat Island Mitigation project will plan, permit, and improve the immediate site surrounding the building to house the Food Hub for the St. Rest + Food to Share Hub: Healthy Food Rescue and Redistribution Hub with related building enhancements to achieve urban greening goals.

Project Details

» Launch date: February 2021
» Anticipated completion date: March 2024
» Project lifetime (post-implementation): # years
» TCC grant funds: $62,220
» Leveraged funds: $141,854
»Project Lead: Fresno Metro Ministry

Estimated Lifetime Benefits

» GHG emissions reductions: 143 MTCO2e
» Trees planted: 41 trees
» Avoided stormwater runoff: 248,752 gallons
» Direct jobs from TCC dollars: 0.4 FTEs
» Indirect jobs from TCC dollars: 0.1 FTE
» Induced jobs from TCC dollars: 0.3 FTE

Responses to COVID-19

» The pandemic lengthened time frames and led to extreme price inflation in the construction sector

Fresno City College: West Fresno Satellite Campus

The Fresno City College: West Fresno Satellite Campus project will develop a satellite campus in West Fresno with a park-like setting with large areas of urban greening, new bicycle and pedestrian paths connected to the neighborhood's active transportation plan, planting over 450 trees to maximize shading around buildings and pathways, landscaping with drought resistant plants, outdoor study spaces, and green infrastructure for storm water retention and groundwater recharge.

Project Details

» Launch date: April 2019
» Anticipated completion date: March 2024
» Project lifetime (post-implementation): # years
» TCC grant funds: $16,542,746
» Leveraged funds: $70,000,000
» Project Lead: State Center Community College District

Estimated Lifetime Benefits

» GHG emissions reductions: 936 MTCO2e
» VMT reduction: 146,040 pedestrian miles
» VMT reduction: 237,390 bicycle miles
» Trees planted: 450 trees
» Avoided stormwater runoff: 2,224,959 gallons
» Travel costs savings: $212,894
» Direct jobs from TCC dollars: 119 FTEs
» Indirect jobs from TCC dollars: 26 FTE
» Induced jobs from TCC dollars: 73 FTE

Responses to COVID-19

» Extended the time period for submissions to the art competition due to the pandemic and a lack of local entries

PROFILES:
LEVERAGED PROJECTS

Historic Chinatown at Kern Street and F Street, where several TCC and leveraged-only projects will come to fruition.
Photo credit: Fresno Bee

IN ADDITION to the 17 Transform Fresno projects that are receiving TCC funding, the City of Fresno has also included four leveraged projects as part of its Transform Fresno package. These leveraged projects are independently funded and help further the objectives of TCC. In Fresno, these four leveraged projects include:

- Chinatown Property Based Improvement District
- Fresno EOC's Partnership for Energy Savings and GHG Reductions in SW Fresno: EFMP Plus-Up Vehicle Replacement and Incentives
- Southwest Offsite Improvements
- TCC Connector

These four projects are part of a long-standing effort underway in Fresno to transform the economic, health, and mobility conditions of residents. The TCC grant will allow the City of Fresno to augment its existing efforts by funding local business retention and development, providing rebates for electric vehicle and charging infrastructure, increasing transit route frequencies, and installing safer biking and walking paths. The following section provides an overview of the four leveraged projects underway in Fresno.

Chinatown Property Based Improvement District

The Central Fish Company, a family-owned business established in 1950, is considered a cornerstone business in the Chinatown neighborhood. Photo credit: Fresno Flyer

THIS TRANSFORM FRESNO leveraged-only project will fund a Property Based Improvement District (PBID) in Chinatown. The City of Fresno serves as a lead partner for the Chinatown PBID. The overarching goals for the Chinatown PBID include job creation, business attraction and retention, economic growth, and drawing new investments. The PBID will complement other planned TCC investments into urban greening, pedestrian infrastructure, and housing projects in Chinatown.

The project has two main components, including a feasibility study and the potential formation of the PBID. For the feasibility study, the City of Fresno has hired a consultant to identify property owners in the potential district. Efforts by the consultant include assessing service priorities and support levels, outreach to educate property owners and stakeholders regarding the proposed district, and providing a finalized findings report with recommendations on the feasibility of the PBID. If the PBID is found to be feasible, the second phase will be the formation of the PBID.

Recent Accomplishments*

- Hired consultant to conduct a Feasibility Study
- Held 9 meetings with Chinatown area property owners

* Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

Continued outreach efforts will educate property owners on the proposed PBID, a Draft Management District Plan, and the preparation of a PBID petition for the public hearing and a ballot process. Several of the tasks and responsibilities for forming the PBID are outlined in the Displacement Avoidance Plan (DAP), which share overarching goals for preventing displacement of existing businesses while TCC investments are implemented in Chinatown.

Chinatown Property Based Improvement District

Project Details

» Launch date: July 2019

» Anticipated completion date: February 2022

» Project lead: City of Fresno

» TCC grant funds: $0

» Leveraged funds: $75,000

Progress Through FY 2019-2020

» Held kickoff meeting with 11 attendees

EFMP Plus-Up Vehicle Replacement and Incentives

An electric vehicle plugged in and charging. Photo credit: MyEV

FRESNO EOC is partnering with the nonprofit organization Valley Clean Air Now (Valley CAN) to implement the Enhanced Fleet Modernization Program (EFMP) Plus-Up Vehicle Replacement and Incentives project. The project is based on the existing EFMP Plus-Up program, which is a GHG reduction pilot currently operating in the San Joaquin Valley Air Pollution Control District. The EFMP Plus-Up program offers rebates to low- and moderate-income households that voluntarily scrap or retire a working, high-emitting vehicle and replace it with cleaner, alternative fuel option such as a hybrid, plug-in hybrid electric, battery-electric, or fuel-cell electric vehicle. The total rebate amount available varies depending on household income and the type of replacement vehicle, ranging from a minimum of $1,500 to a maximum of $9,500. Since project launch, electric vehicle vouchers in the amount of $193,500 have been issued and used to purchase electric vehicles to replace older vehicles.

Recent Accomplishments*

- 6 battery-electric and plug-in hybrid incentives for $9,500 distributed
- 3 hybrid 35+ mpg vouchers for $7,000 distributed
- 9 high-emitting vehicles retired
- 9 qualified electric vehicle replacements purchased
- 1 person provided commentary or input on project implementation

*Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

This leveraged-only project will be carried out in close conjunction with another Transform Fresno project led by Fresno EOC. The organization will identify approximately 135 households that may qualify for the EFMP Plus-Up program through Fresno EOC's Partnership for Energy Savings and GHG Reductions in Southwest Fresno (this project is described more in depth under the Solar and Energy Efficiency Projects chapter).

Valley CAN will assess the qualifications of the households to participate in the EFMP Plus-Up program and will provide approximately 50 vehicle replacements, 20 home charging stations, 10 home service panel upgrades, and 40 PG&E Clean Fuel Rebate Program Incentives. The households that qualify for the Vehicle Replacement and Incentives project will benefit from reduced vehicle operation and fuel costs. The project also achieves GHG reductions that further the air quality improvement goals for the community.

Enhanced Fleet Modernization Program (EFMP) Plus-Up Vehicle Replacement and Incentives

Project Details

» Launch date: July 2019
» Anticipated Completion date: December 2021
» Project lifetime: 40 years
»Project lead: Valley Clean Air Now
» TCC grant funds: $0
» Leveraged funds: $530,000
»

Progress Through FY 2019-2020

» 22 households referred to ValleyCAN
» 7 battery-electric and plug-in hybrid incentives for $9,500 distributed
» 7 hybrid 35+ mpg vouchers for $7,000 distributed
» 1 hybrid 25-34 mpg voucher for $4,000 distributed
» 15 qualified electric vehicle replacements
» 6 people provided commentary or input on project implementation

Southwest Offsite Improvements

Architectural rendering by SIM-PBK of the new West Fresno Satellite Campus. Photo credit: State Center Community College District

THE SOUTHWEST OFFSITE IMPROVEMENTS project will install active transportation infrastructure including trails, sidewalks, and bike lanes surrounding the new West Fresno Satellite Campus. The project also plans to install underground power lines and make water utility and roadway improvements. The boundaries of the project are South M.L.K Jr. Boulevard and East Church, East Jensen, and South Walnut avenues.

The leverage-only Southwest Offsite Improvements project supports the active transportation components of the TCC funded West Fresno Satellite Campus project (see the Urban Greening chapter for more information on this project). The improvements will support multimodal travel in the neighborhood and access to the new community college campus. The City of Fresno serves as the lead partner for this project, which is expected to be operational in 2023.

Recent Accomplishments*

- 30% design completed December 2020
- Coordinating with College Campus construction and future developers

*Only includes accomplishments during the last fiscal year (July 2020 through June 2021)

Project Details

- Launch date: January 2018
- Anticipated completion date: March 2023
- TCC grant funds: $0
- Leveraged funds: $15,732,648

Progress Through FY 2019-2020

- Executed Agreement with architectural & engineering Services firm in June 2020

TCC Connector

A FAX bus stopping along Route 38. Photo credit: City of Fresno Department of Transportation

THE CITY OF FRESNO Department of Transportation will increase transit frequencies for the Fresno Area Express (FAX) along the portion of Route 38 that runs between the Downtown Transit Center (L Shelter at Courthouse Park) and the bus stop at the intersection of South Cedar and East Jensen avenues. This segment of Route 38 previously ran on 30-minute headways. The TCC Connector adds buses and operators to run at 15-minute headways from 6 a.m. to 6 p.m. on weekdays. In addition to recruiting, hiring, and training additional bus drivers, the leveraged funds will be used to purchase two 40-foot electric buses and construct a charging station for the zero-emission vehicles.

This portion of Route 38 runs through the Transform Fresno project area and will directly benefit residents with faster service times, making it more convenient to catch the bus at one of the 28 stops between the Downtown Transit Center and Cedar/Jensen. The TCC Connector launched in January 2021. Increased transit service will initially be met with near-zero compressed natural gas (CNG) buses, and will be replaced with electric buses once procured.

Recent Accomplishments*

- Increased transit service frequency launched January 4, 2021
- 2 electric buses on order
- Electric bus charging station design/plans underway
- Electric infrastructure project construction is set to be awarded in August 2021 for an electric charge management system installation at Fresno Area eXpress (FAX). The system can charge 46 buses and 23 relief vehicles to accommodate future growth in the FAX electric vehicle fleet

*Only covers the last fiscal year (July 2020 - June 2021)

Project Details

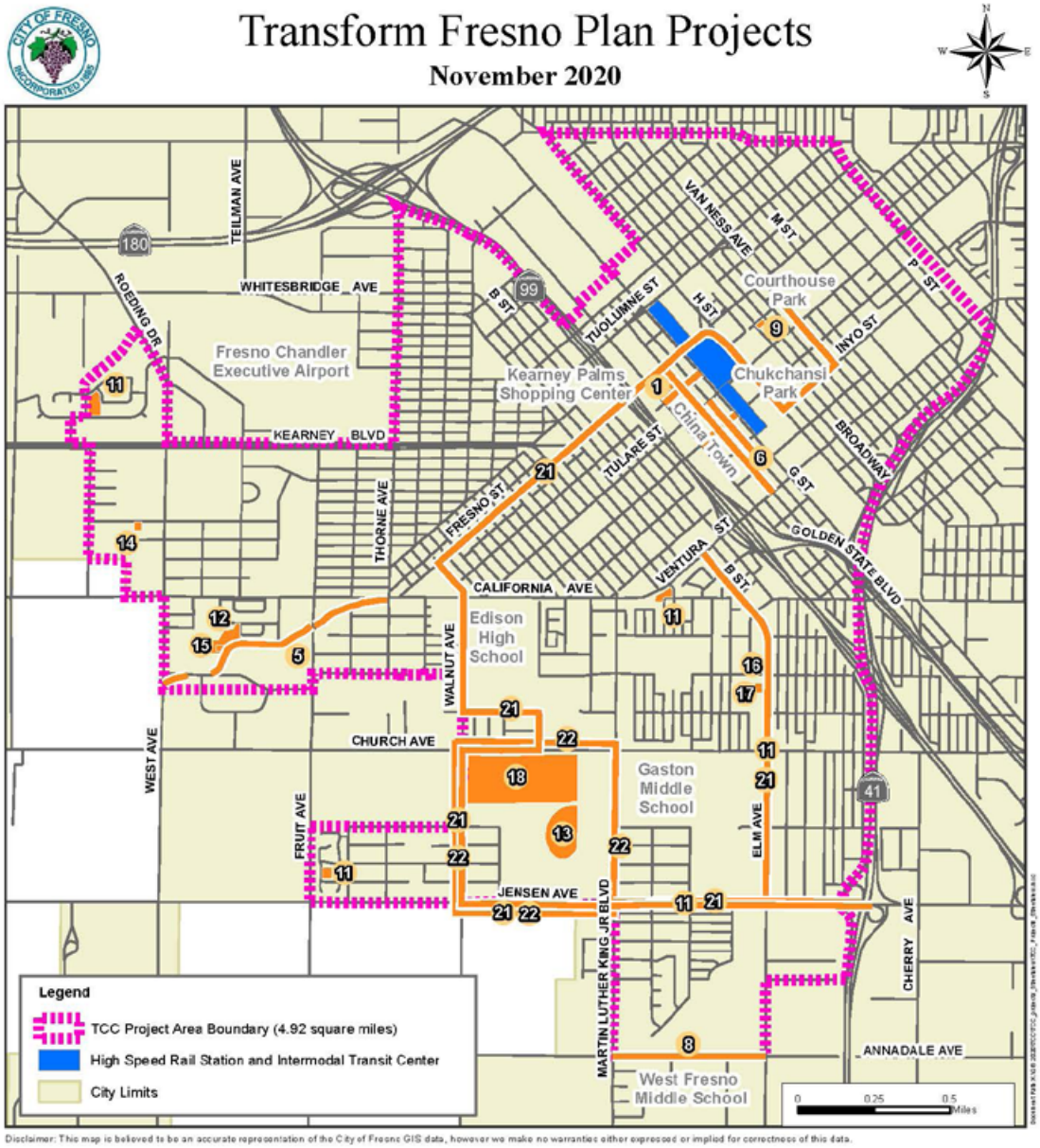
- Launch date: January 2021
- Anticipated completion date: August 2022
- TCC grant funds: $0
- Leveraged funds: $3,532,774

Progress Through FY 2019-2020

- Procurement underway for the purchase of two 40-foot electric buses
- Procurement underway for the electric bus charging station

APPENDICES

Appendix 1: Supplemental Maps

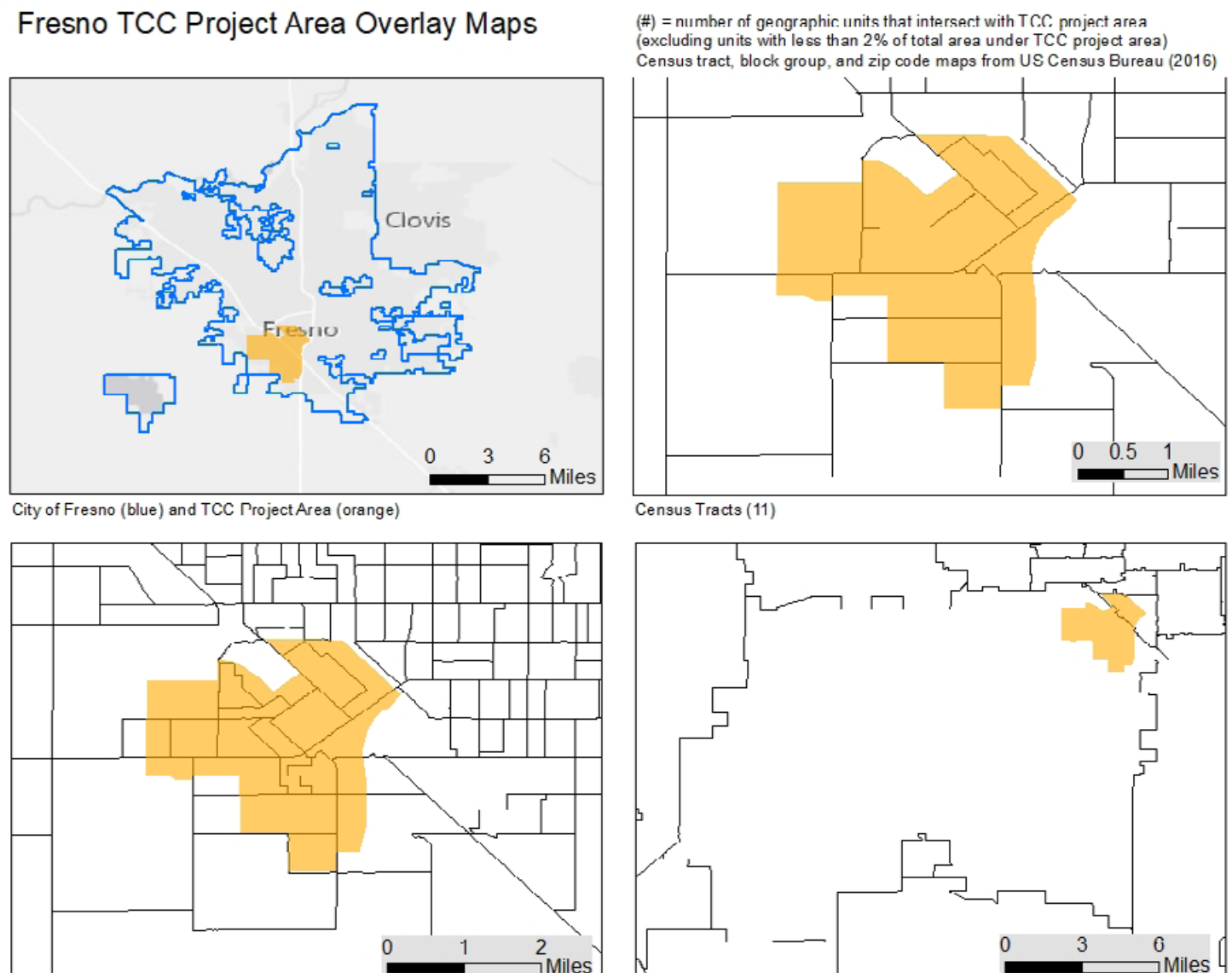


01 - Chinatown Housing Project
05 - Southwest Fresno Trail
06 - Chinatown Urban Greening- Pedestrian Pathways, Lighting and Tree Planting
08 - Annadale Mode Shift
09 - Mariposa Plaza
11 - Southwest Urban Forest Expansion-Tree Planting
12 - Yosemite Village Permaculture Community Garden and Urban Farm
13 - Park at MLK Magnet Core
14 - Inside Out Community Garden
15 - Yo 'Ville Community Orchard
16 &17 - St. Rest and Food to Share Hub
18 - Fresno City College: West Fresno Satellite
21 - TCC Connector - Enhanced Bus Service
22 - Southwest Offsite Improvements

The projects below do not have a specific location and are not depicted on the map.

02 - EOC Partnership for Energy Savings and GHG Reductions in SW Fresno
03 - GRID Solar Collaborative Single-Family Partnership
04 - GRID Solar Collaborative Multi-Family Partnership
07 - Clean Shared Mobility Network
19 - Chinatown Property Based Improvement District
20 - EOC Partnership for Energy Savings and GHG Reductions in SW Fresno: EFMP Plus-Up Vehicle Replacement and Incentives
WDP - Workforce Development:Welding Program
WDP - Workforce Development: Low/Zero EmissionTruck Driver Training

Detailed project map. **Figure credit: City of Fresno.**



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

Appendix 2: Summary of Methods for Estimating Project Benefits

Benefit	Methodology	Version
Avoided stormwater runoff	iTree Planting	1.2.0
Energy cost savings	California Air Resources Board (CARB) Co-benefit Assessment Methodology for Energy and Fuel Cost Savings[11]	September 13,2019
Greenhouse gas (GHG) reductions	CARB GHG Quantification Methodologies by Project Type	FY 2016-17
Jobs (direct, indirect, induced)	CARB Job Co-benefit Assessment Methodology	April 2019
Travel cost savings	CARB Co-benefit Assessment Methodology for Travel Cost Savings[12]	October 18, 2019
Vehicle miles traveled (VMT) reductions	CARB GHG Quantification Methodologies by Project Type	FY 2016-17

[11] 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). 1

[12] 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 is 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: Transform Fresno Collaborative Stakeholder Structure

Governance Structure of Transform Fresno Project Implementation

Name	Established Roles and Responsibilities
City of Fresno	As the Lead Agency, the City of Fresno is tasked with the responsibility of implementing the Master Grant Agreement with the Strategic Growth Council; including compiling and submitting invoices and reporting documents, serving as the primary fiscal agent, implementing the 3 transformative plans, and ensuring a fair, transparent, accountable, participatory, and public implementation process.
Project Partners	The 12 Project Partners are responsible for project implementation, monitoring transformative requirements, indicator tracking and reporting, and ensuring delivery of the projects in accordance with TCC Program Guidelines and the Master Grant Agreement.
Outreach and Oversight Committee	The O&O Committee is the advisory committee that will be a resource for community collaboration and feedback, providing overall guidance on project and transformative plan implementation, and making material changes to projects (such as budget or programmatic changes).
Community Partners	The six Community Partner Agencies will support the building of long-term civic infrastructure and will be required to demonstrate the use of inclusive and meaningful engagement methods that will address the barriers to participation specific to the project area. Each Community Partner agency or organization will carry out tasks in the Community Engagement Plan in a given category, including Prime Community Partner, Data and Reporting Partner, Direct Outreach Partner, Leadership Development Partner, Media and Communications Partner, and Event Coordination Partner.

Transform Fresno Outreach & Oversight Committee Members

Chair	Neighborhood / Members			
	Chinatown	Downtown	Southwest	
Miguel Arias	Ofelia Hemme Morgan Doizaki Jan Minami Barbara Wilson	Amy Arambula Jordan Gustafson Sabrina Kelly Chris Rocha	Mary Curry Chris Finley Sandra Flores B.T. Lewis	Kimberly McCoy Artie Padilla Margarita Rocha Ivanka Saunders Hunt

Transform Fresno Community Partner Outreach Methods

Name	Outreach Methods
Prime Community Partner	Providing translation services; Coordinating Annual Transform Fresno Summit; Providing community engagement updates; Coordinating community meetings; Creating quarterly newsletters; Conducting text, email, and other direct outreach; Coordinating with other Community Partners; Updating the Outreach and Oversight Committee on engagement activities
Data and Reporting Community Partner	Coordinating with 12 Project Partners, Consolidating and Analyzing Survey Data; General Reporting; Coordinating with the Evaluation Team; Producing Semi-Annual Reports; Producing Final Engagement Summary Report
Direct Outreach Community Partner	Printing materials for distribution; Distributing Transform Fresno flyers and mailers; Maintaining a volunteer interest database; Maintaining an online community engagement calendar; Administering surveys
Leadership Development Community Partner	Coordinating the Transform Fresno Youth Leadership Development Program
Media and Communications Community Partner	Creating branding; Updating and maintaining Transform Fresno website; Sharing informational videos; Sharing media for Transform Fresno and project progress; Coordinating radio updates; Coordinating with Partners for Projectwide Style Guide
Event Coordination Community Partner	Coordinating one or two cultural or arts community events; Coordinating project milestone events

Anti-Displacement Task Force Members

Member Type	Specific Requirements	Member Name
Residential Tenants	Fulton Corridor Specific Plan Area	Robert Fuentes
	Downtown Neighborhoods Community Plan Area	Hilda Lopez
	Southwest Fresno Specific Plan Area	Debbie Darden
Commercial Tenants	Downtown	Ana Li De Alba
	Chinatown or Southwest Fresno	Morgan Doizaki
Developers	Affordable Housing Developer	Preston Prince
	Market Rate Developer	Sal Gonzales
	Community Development Corporation	Eric Payne
	Community Development Corporation	Cherella Nicholson
Advocates	Nonprofit	Grecia Elenes
	Neighborhood	Patience Milrod
	Individual/non-affiliate	Kathryn Forbes
	Individual/non-affiliate	Artie Padilla

Appendix 4: Transform Fresno TCC Census Tracts

Census Tract GeoID Number	City	Population (ACS 2011-2016 estimate)	Area (sq. mi.)	Population Density (pop./ sq.mi.)	Overlap with TCC Project Area (%)
14000US06019000700	Fresno / Unincorporated	3,758	3.20	1,175	18%
14000US06019001100	Fresno	2,728	1.45	1,883	27%
14000US06019001000	Fresno / Unincorporated	3,955	1.89	2,093	14%
14000US06019000901	Fresno / Unincorporated	2,979	0.75	3,947	83%
14000US06019000200	Fresno	3,147	0.77	4,100	68%
14000US06019000300	Fresno	3,270	0.73	4,487	100%
14000US06019000400	Fresno	6,016	1.31	4,578	22%
14000US06019000600	Fresno	5,351	0.95	5,624	44%
14000US06019000902	Fresno	5,082	0.76	6,680	83%
14000US06019000100	Fresno	3,036	0.33	9,323	100%

Appendix 5: Transform Fresno Control Census Tracts

Census Tract GeoID Number	City	Population (ACS 2011-2016 estimate)	Area (sq. mi.)	Population Density (pop./ sq.mi.)
14000US06019001202	Fresno / Unincorporated	4,828	1.31	3,676
14000US06019001304	Fresno	5,528	0.50	1,0948
14000US06019001407	Fresno	4,530	0.50	9,078
14000US06019002800	Fresno	4,458	1.02	4,372
14000US06019003202	Fresno / Unincorporated	5,352	0.62	8,630
14000US06019003807	Fresno / Unincorporated	3,144	1.75	1,780
14000US06019004704	Fresno	4,772	0.49	9,820
14000US06019004802	Fresno	4,871	0.56	8,674
14000US06019005100	Fresno	6,276	1.00	6,281
14000US06019005403	Fresno	4,267	0.50	8,521

Appendix 6: Indicator Data

Appendix 6.1: Demographics

Table A6.1.1: American Community Survey (ACS) Demographic Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Total Population (B01003)	2009-2013	39,140	1,647	48,862	1,786	939,605	0.0	37,659,181	0.0
	2010-2014	39,389	1,499	49,190	1,716	948,844	0.0	38,066,920	0.0
	2011-2015	38,854	1,349	48,698	1,598	956,749	0.0	38,421,464	0.0
	2012-2016	39,322	1,412	48,026	1,572	963,160	0.0	38,654,206	0.0
	2013-2017	38,699	1,501	48,598	1,796	971,616	0.0	38,982,847	0.0
	2014-2018	39,860	1,494	50,165	1,633	978,130	0.0	39,148,760	0.0
	2015-2019	39,487	1,536	49,882	1,608	984,521	0.0	39,283,497	0.0
	2016-2020	32,449	1,960	48,623	2,453	990,204	0.0	39,346,023	0
Percent Hispanic, all races (B03002)	2009-2013	61.5%	2.9%	58.2%	3.3%	50.8%	0.0%	37.9%	0.0%
	2010-2014	63.5%	2.6%	55.6%	2.9%	51.2%	0.0%	38.2%	0.0%
	2011-2015	65.0%	2.4%	57.3%	2.8%	51.6%	0.0%	38.4%	0.0%
	2012-2016	65.7%	2.6%	56.2%	3.0%	52.0%	0.0%	38.6%	0.0%
	2013-2017	65.5%	2.8%	59.1%	2.8%	52.4%	0.0%	38.8%	0.0%
	2014-2018	67.8%	2.3%	59.3%	2.5%	52.7%	0.0%	38.9%	0.0%
	2015-2019	68.2%	2.3%	60.8%	2.7%	53.1%	0.0%	39.0%	0.0%
	2016-2020	67.5%	2.5%	57.5%	3.1%	53.4%	0.0%	39.1%	0.0%
Percent White, non-Hispanic (B03002)	2009-2013	6.4%	1.0%	17.5%	1.8%	32.2%	0.1%	39.7%	0.0%
	2010-2014	6.8%	1.1%	16.6%	1.6%	31.6%	0.1%	39.2%	0.0%
	2011-2015	6.2%	1.0%	15.3%	1.4%	31.2%	0.1%	38.7%	0.0%
	2012-2016	6.5%	1.0%	15.1%	1.5%	30.8%	0.0%	38.4%	0.0%
	2013-2017	7.2%	1.4%	15.3%	2.0%	30.2%	0.1%	37.9%	0.0%
	2014-2018	7.2%	1.1%	15.8%	2.1%	29.8%	0.1%	37.5%	0.0%
	2015-2019	7.1%	1.3%	16.2%	2.3%	29.4%	0.0%	37.2%	0.0%
	2016-2020	8.8%	2.3%	17.6%	2.8%	28.7%	0.0%	36.5%	0.0%

*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 the UCLA Luskin Center for Innovation 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.

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent communities of color, non-Hispanic: Black, Asian, Pacific Islander, American Indian, other, and two or more races (B03002)	2009-2013	32.1%	2.8%	24.2%	2.3%	17.1%	0.2%	22.4%	0.0%
	2010-2014	29.7%	2.6%	27.8%	2.3%	17.1%	0.2%	22.7%	0.0%
	2011-2015	28.8%	2.2%	27.3%	2.4%	17.2%	0.2%	22.9%	0.0%
	2012-2016	27.9%	2.1%	28.7%	2.8%	17.2%	0.2%	23.1%	0.0%
	2013-2017	27.4%	2.0%	25.6%	2.0%	17.3%	0.2%	23.3%	0.0%
	2014-2018	25.0%	2.0%	24.8%	2.1%	17.5%	0.2%	23.6%	0.0%
	2015-2019	24.7%	2.1%	23.0%	2.1%	17.5%	0.2%	23.8%	0.0%
	2016-2020	23.7%	2.7%	24.8%	2.6%	18.0%	0.3%	24.1%	0.1%
Percent other communities of color, non-Hispanic: Pacific Islander, American Indian, other, two or, more races	2009-2013	1.7%	0.6%	2.1%	0.7%	2.8%	0.2%	3.6%	0.0%
	2010-2014	2.1%	0.8%	2.5%	0.9%	2.8%	0.2%	3.7%	0.0%
	2011-2015	2.1%	0.6%	2.1%	0.6%	2.9%	0.1%	3.7%	0.0%
	2012-2016	2.4%	0.7%	1.9%	0.5%	2.7%	0.2%	3.8%	0.0%
	2013-2017	1.8%	0.5%	2.2%	0.7%	2.8%	0.2%	3.9%	0.0%
	2014-2018	2.4%	0.8%	2.2%	0.7%	2.9%	0.2%	3.9%	0.0%
	2015-2019	1.8%	0.5%	2.1%	0.6%	2.9%	0.2%	4.0%	0.0%
	2016-2020	2.5%	0.9%	2.3%	0.7%	3.1%	0.2%	4.4%	0.0%
Percent Black, non-Hispanic (B03002)	2009-2013	20.1%	2.0%	10.8%	1.6%	4.8%	0.1%	5.7%	0.0%
	2010-2014	17.9%	1.9%	12.4%	1.5%	4.8%	0.1%	5.7%	0.0%
	2011-2015	16.5%	1.7%	11.7%	1.6%	4.7%	0.1%	5.6%	0.0%
	2012-2016	17.0%	1.6%	12.9%	1.9%	4.7%	0.1%	5.6%	0.0%
	2013-2017	17.4%	1.8%	10.3%	1.2%	4.7%	0.1%	5.5%	0.0%
	2014-2018	14.6%	1.5%	10.0%	1.3%	4.5%	0.1%	5.5%	0.0%
	2015-2019	14.4%	1.7%	8.6%	1.2%	4.5%	0.1%	5.5%	0.0%
	2016-2020	13.6%	2.1%	9.8%	1.7%	4.4%	0.1%	5.4%	0.0%
Percent Asian, non-Hispanic (B03002)	2009-2013	10.3%	2.1%	11.4%	1.6%	9.4%	0.1%	13.1%	0.0%
	2010-2014	9.8%	1.7%	12.8%	1.7%	9.5%	0.1%	13.3%	0.0%
	2011-2015	10.2%	1.4%	13.6%	1.8%	9.6%	0.1%	13.5%	0.0%
	2012-2016	8.5%	1.3%	13.9%	2.1%	9.7%	0.1%	13.7%	0.0%
	2013-2017	8.2%	1.1%	13.1%	1.7%	9.9%	0.1%	13.9%	0.0%
	2014-2018	8.0%	1.2%	12.6%	1.6%	10.0%	0.1%	14.1%	0.0%
	2015-2019	8.4%	1.3%	12.3%	1.7%	10.1%	0.1%	14.3%	0.0%
	2016-2020	7.6%	1.8%	12.7%	2.0%	10.4%	0.1%	14.6%	0.0%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent Pacific Islanders, non-Hispanic (B03002)	2009-2013	0.2%	0.3%	0.2%	0.2%	0.1%	0.0%	0.4%	0.0%
	2010-2014	0.2%	0.3%	0.3%	0.3%	0.1%	0.0%	0.4%	0.0%
	2011-2015	0.3%	0.3%	0.1%	0.1%	0.1%	0.0%	0.4%	0.0%
	2012-2016	0.3%	0.4%	0.1%	0.1%	0.1%	0.0%	0.4%	0.0%
	2013-2017	0.1%	0.1%	0.1%	0.1%	0.1%	0.9%	0.4%	0.0%
	2014-2018	0.1%	0.2%	0.0%	0.0%	0.1%	0.0%	0.4%	0.9%
	2015-2019	0.1%	0.2%	0.1%	0.1%	0.1%	0.0%	0.4%	0.0%
	2016-2020	0.3%	0.5%	0.1%	0.1%	0.1%	0.0%	0.3%	0.0%
Percent American Indian, non-Hispanic (B03002)	2009-2013	0.5%	0.2%	0.4%	0.4%	0.5%	0.1%	0.4%	0.0%
	2010-2014	0.4%	0.2%	0.5%	0.5%	0.5%	0.0%	0.4%	0.0%
	2011-2015	0.4%	0.2%	0.3%	0.3%	0.5%	0.0%	0.4%	0.0%
	2012-2016	0.3%	0.2%	0.2%	0.1%	0.5%	0.0%	0.4%	0.0%
	2013-2017	0.3%	0.2%	0.4%	0.3%	0.4%	0.1%	0.4%	0.0%
	2014-2018	0.3%	0.2%	0.4%	0.2%	0.5%	0.0%	0.4%	0.0%
	2015-2019	0.3%	0.1%	0.4%	0.3%	0.5%	0.1%	0.4%	0.0%
	2016-2020	0.6%	0.5%	0.5%	0.3%	0.5%	0.0%	0.3%	0.0%
Percent two or more races, non-Hispanic (B03002)	2009-2013	1.0%	0.5%	1.4%	0.6%	2.0%	0.1%	2.6%	0.0%
	2010-2014	1.4%	0.7%	1.7%	0.7%	2.0%	0.1%	2.7%	0.0%
	2011-2015	1.4%	0.5%	1.6%	0.5%	2.0%	0.1%	2.8%	0.0%
	2012-2016	1.7%	0.6%	1.5%	0.5%	2.0%	0.1%	2.9%	0.0%
	2013-2017	1.4%	0.5%	1.7%	0.6%	2.0%	0.1%	2.9%	0.0%
	2014-2018	1.9%	0.7%	1.7%	0.6%	2.1%	0.2%	3.0%	0.0%
	2015-2019	1.5%	0.4%	1.5%	0.5%	2.2%	0.2%	3.0%	0.0%
	2016-2020	1.4%	0.6%	1.7%	0.6%	2.4%	0.2%	3.4%	0.0%
Percent other, non-Hispanic (B03002)	2009-2013	0.0%	0.1%	0.0%	0.0%	0.2%	0.1%	0.2%	0.0%
	2010-2014	0.0%	0.1%	0.0%	0.1%	0.2%	0.1%	0.2%	0.0%
	2011-2015	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%	0.0%
	2012-2016	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%	0.0%
	2013-2017	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%	0.0%
	2014-2018	0.0%	0.1%	0.1%	0.2%	0.2%	0.1%	0.2%	0.0%
	2015-2019	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.3%	0.0%
	2016-2020	0.2%	0.2%	0.1%	0.1%	0.2%	0.1%	0.3%	0.0%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent foreign-born population (B05006))	2009-2013	27.4%	2.5%	25.0%	2.7%	21.9%	0.3%	27.0%	0.1%
	2010-2014	27.2%	2.3%	23.5%	2.2%	21.7%	0.3%	27.0%	0.1%
	2011-2015	26.2%	1.9%	23.8%	2.1%	21.4%	0.3%	27.0%	0.1%
	2012-2016	26.0%	1.8%	22.5%	1.8%	21.4%	0.3%	27.0%	0.1%
	2013-2017	25.6%	1.8%	22.8%	1.7%	21.0%	0.3%	27.0%	0.1%
	2014-2018	24.9%	1.6%	22.2%	1.7%	21.3%	0.4%	26.9%	0.1%
	2015-2019	24.5%	1.6%	23.0%	1.9%	21.2%	0.4%	26.8%	0.1%
	2016-2020	22.3%	1.7%	22.4%	2.2%	20.4%	0.4%	26.6%	0.1%
Percent born in Asia (B05006)	2009-2013	4.4%	1.0%	5.7%	0.9%	5.6%	0.2%	9.8%	0.0%
	2010-2014	4.6%	1.0%	6.4%	1.0%	5.8%	0.2%	10.0%	0.0%
	2011-2015	4.4%	0.8%	7.0%	1.1%	5.8%	0.2%	10.1%	0.0%
	2012-2016	3.9%	0.8%	6.6%	1.2%	5.8%	0.2%	10.2%	0.0%
	2013-2017	4.0%	0.7%	6.1%	1.0%	5.8%	0.2%	10.4%	0.0%
	2014-2018	4.0%	0.7%	6.1%	1.1%	5.9%	0.2%	10.5%	0.0%
	2015-2019	3.9%	0.7%	6.5%	1.2%	5.8%	0.2%	10.6%	0.0%
	2016-2020	3.4%	0.7%	7.4%	1.7%	5.9%		10.6%	0.0%
Percent born in Africa (B05006)	2009-2013	0.0%	0.1%	0.0%	0.1%	0.2%	0.0%	0.4%	0.0%
	2010-2014	0.0%	0.1%	0.1%	0.1%	0.2%	0.0%	0.4%	0.0%
	2011-2015	0.0%	0.1%	0.2%	0.2%	0.2%	0.0%	0.4%	0.0%
	2012-2016	0.0%	0.1%	0.3%	0.3%	0.2%	0.0%	0.5%	0.0%
	2013-2017	0.0%	0.1%	0.3%	0.3%	0.2%	0.0%	0.5%	0.0%
	2014-2018	0.1%	0.1%	0.3%	0.3%	0.2%	0.1%	0.5%	0.0%
	2015-2019	0.0%	0.1%	0.3%	0.3%	0.2%	0.1%	0.5%	0.0%
	2016-2020	0.1%	0.1%	0.3%	0.3%	0.2%	0.1%	0.5%	0.0%
Percent born in Latin America (B05006)	2009-2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2010-2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2011-2015	21.5%	1.9%	16.0%	1.9%	14.6%	0.3%	14.2%	0.1%
	2012-2016	21.8%	1.7%	14.8%	1.6%	14.5%	0.3%	14.0%	0.0%
	2013-2017	21.3%	1.8%	15.7%	1.5%	14.2%	0.3%	13.8%	0.1%
	2014-2018	20.7%	1.6%	15.2%	1.5%	14.4%	0.3%	13.7%	0.1%
	2015-2019	20.4%	1.5%	15.7%	1.5%	14.3%	0.3%	13.5%	0.1%
	2016-2020	18.7%	1.7%	14.2%	1.6%	13.4%	0.3%	13.2%	0.1%

Appendix 6.2: Economy

Table A6.2.1: American Community Survey (ACS) Economic Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Median household income (B19001)	2009-2013	$22,843	N/A	$25,319	N/A	$45,563	$638	$61,094	$157
	2010-2014	$22,332	N/A	$26,387	N/A	$45,201	$713	$61,489	$154
	2011-2015	$22,148	N/A	$26,502	N/A	$45,233	$692	$61,818	$156
	2012-2016	$23,075	N/A	$24,848	N/A	$45,963	$661	$63,783	$188
	2013-2017	$23,405	N/A	$26,905	N/A	$48,730	$655	$67,169	$192
	2014-2018	$24,171	N/A	$27,223	N/A	$51,261	$808	$71,228	$217
	2015-2019	$24,688	N/A	$28,011	N/A	$53,969	$794	$75,235	$232
	2016-2020	$27,686	N/A	$30,559	N/A	$57,109	$929	$78,672	$270
Percent of individuals living below poverty (B17001)	2009-2013	50.5%	3.7%	41.9%	3.6%	26.0%	0.6%	15.9%	0.1%
	2010-2014	52.7%	3.7%	41.7%	3.1%	27.4%	0.6%	16.4%	0.1%
	2011-2015	52.7%	3.2%	42.0%	3.1%	26.8%	0.7%	16.3%	0.1%
	2012-2016	52.2%	3.4%	46.6%	3.4%	26.9%	0.6%	15.8%	0.1%
	2013-2017	50.3%	3.6%	43.0%	3.4%	25.4%	0.6%	15.1%	0.1%
	2014-2018	50.1%	4.2%	42.0%	3.1%	24.1%	0.6%	14.3%	0.1%
	2015-2019	47.3%	3.8%	41.9%	3.2%	22.5%	0.7%	13.4%	0.1%
	2016-2020	48.0%	4.7%	38.2%	3.6%	20.8%	0.7%	12.6%	0.1%
Percent high income ($125k +) (B19001)	2009-2013	2.4%	1.1%	1.7%	0.8%	11.1%	0.4%	19.9%	0.1%
	2010-2014	1.7%	0.9%	1.6%	0.8%	11.1%	0.4%	20.4%	0.1%
	2011-2015	2.2%	0.8%	2.1%	0.9%	11.3%	0.4%	20.9%	0.1%
	2012-2016	1.9%	0.7%	1.7%	0.8%	12.0%	0.4%	22.1%	0.1%
	2013-2017	2.3%	0.9%	3.0%	1.1%	13.3%	0.4%	23.9%	0.1%
	2014-2018	1.9%	0.8%	3.2%	1.0%	14.6%	0.5%	26.1%	0.1%
	2015-2019	2.7%	0.9%	3.8%	1.2%	15.8%	0.5%	28.0%	0.1%
	2016-2020	2.0%	1.0%	4.8%	1.4%	17.2%	0.6%	29.8%	0.1%
Percent with less than high school education (S1501)	2009-2013	48.5%	3.0%	38.9%	3.6%	26.9%	0.5%	18.8%	0.1%
	2010-2014	47.9%	2.8%	37.9%	2.6%	26.8%	0.5%	18.5%	0.1%
	2011-2015	46.4%	2.8%	37.8%%	2.7%	26.5%	0.5%	18.2%	0.1%
	2012-2016	44.2%	2.5%	37.0%	2.8%	26.2%	0.5%	17.9%	0.1%
	2013-2017	45.3%	3.0%	36.0%	2.7%	25.3%	0.5%	17.5%	0.1%
	2014-2018	43.1%	2.5%	36.7%	2.8%	24.7%	0.5%	17.1%	0.1%
	2015-2019	42.0%	2.6%	35.1%	2.8%	24.0%	0.4%	16.7%	0.1%
	2016-2020	40.5%	2.9%	33.4%	2.8%	22.7%	0.5%	16.1%	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 the UCLA Luskin Center for Innovation 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.

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent with bachelor's degree or higher (S1501)	2009-2013	6.5%	1.1%	6.7%	1.0%	19.6%	0.4%	30.7%	0.1%
	2010-2014	6.9%	1.1%	7.8%	1.3%	19.5%	0.4%	31.0%	0.1%
	2011-2015	5.8%	1.0%	8.4%	1.3%	19.4%	0.4%	31.4%	0.1%
	2012-2016	6.5%	1.0%	8.4%	1.3%	19.7%	0.4%	32.0%	0.1%
	2013-2017	6.1%	1.1%	7.9%	1.3%	20.1%	0.4%	32.6%	0.1%
	2014-2018	7.6%	1.3%	8.0%	1.4%	20.7%	0.4%	33.3%	0.1%
	2015-2019	7.8%	1.4%	8.0%	1.6%	21.2%	0.4%	33.9%	0.1%
	2016-2020	6.8%	1.4%	9.1%	1.8%	22.0%	0.5%	34.7%	0.1%
Percent employed for the population 16 years and over (B23025)	2009-2013	36.2%	2.5%	42.6%	1.7%	52.4%	0.4%	56.4%	0.1%
	2010-2014	36.6%	2.3%	43.3%	2.1%	52.3%	0.4%	56.4%	0.1%
	2011-2015	36.5%	2.2%	42.5	2.0%	52.8%	0.5%	56.9%	0.1%
	2012-2016	38.4%	2.3%	42.7%	2.0%	53.3%	0.4%	57.5%	0.1%
	2013-2017	39.6%	2.2%	45.6%%	2.1%	54.3%	0.3%	58.2%	0.1%
	2014-2018	40.1%	2.0%	46.5%	2.2%	55.0%	0.4%	58.9%	0.1%
	2015-2019	40.3%	1.9%	48.4%	2.1%	55.6%	0.4%	59.4%	0.1%
	2016-2020	39.5%	2.2%	49.9%	2.6%	55.3%	0.4%	59.4%	0.1%

Appendix 6.3: Energy

Table A6.3.1: American Community Survey (ACS) Energy Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent of households heating home with electricity (B25040)	2009-2013	27.0%	2.6%	42.0%	3.0%	35.5%	0.7%	25.5%	0.1%
	2010-2014	25.7%	2.3%	43.1%	2.8%	36.0%	0.7%	25.8%	0.1%
	2011-2015	26.4%	2.5%	44.4%	3.0%	36.1%	0.6%	26.2%	0.1%
	2012-2016	27.3%	2.7%	43.2%	2.9%	35.7%	0.5%	26.4%	0.1%
	2013-2017	30.5%	2.8%	43.2%	3.0%	35.4%	0.5%	26.5%	0.1%
	2014-2018	32.3%	2.9%	42.0%	2.8%	34.5%	0.5%	26.4%	0.1%
	2015-2019	37.5%	3.2%	42.3%	3.1%	33.8%	0.6%	26.6%	0.1%
	2016-2020	47.3%	5.4%	42.5%	3.0%	34.4%	0.7%	27.1%	0.1%
Percent of households heating home with other non-fossil fuels (B25040)	2009-2013	0.0%	0.2%	0.3%	0.3%	2.0%	0.2%	1.8%	0.0%
	2010-2014	0.0%	0.2%	0.3%	0.3%	2.0%	0.2%	1.9%	0.0%
	2011-2015	0.2%	0.3%	0.3%	0.3%	2.1%	0.2%	1.9%	0.0%
	2012-2016	0.3%	0.3%	0.4%	0.3%	2.1%	0.2%	1.9%	0.0%
	2013-2017	0.3%	0.3%	0.6%	0.5%	2.5%	0.2%	2.0%	0.0%
	2014-2018	0.4%	0.4%	0.9%	0.6%	2.7%	0.2%	2.1%	0.0%
	2015-2019	0.6%	0.4%	1.1%	0.6%	3.1%	0.2%	2.1%	0.0%
	2016-2020	0.6%	0.5%	1.0%	0.6%	3.1%	0.2%	2.2%	0.0%
Percent of households heating home with utility gas (B25040)	2009-2013	70.3%	2.7%	55.7%	2.8%	55.5%	0.6%	66.0%	0.1%
	2010-2014	71.5%	2.4%	54.3%	2.8%	55.1%	0.6%	65.6%	0.1%
	2011-2015	70.5%	2.6%	53.0%	2.9%	54.9%	0.7%	65.0%	0.1%
	2012-2016	69.8%	2.6%	53.6%	2.9%	55.2%	0.6%	64.6%	0.1%
	2013-2017	66.7%	2.7%	53.4%	2.9%	55.4%	0.7%	64.4%	0.1%
	2014-2018	63.9%	2.8%	54.1%	2.8%	56.0%	0.5%	64.3%	0.1%
	2015-2019	59.8%	3.1%	53.8%	3.0%	56.5%	0.5%	64.1%	0.0%
	2016-2020	49.6%	2.6%	53.5%	3.6%	55.8%	0.7%	63.6%	0.1%
Percent of households heating home with other fossil fuels (B25040)	2009-2013	0.7%	0.5%	1.3%	0.6%	5.2%	0.3%	3.5%	0.0%
	2010-2014	0.7%	0.4%	1.6%	0.6%	5.0%	0.2%	3.4%	0.0%
	2011-2015	0.7%	0.4%	1.6%	0.7%	4.9%	0.2%	3.4%	0.0%
	2012-2016	0.6%	0.4%	1.4%	0.6%	5.0%	0.2%	3.4%	0.0%
	2013-2017	0.4%	0.4%	1.2%	0.6%	4.7%	0.2%	3.5%	0.0%
	2014-2018	0.4%	0.4%	1.6%	0.7%	4.8%	0.2%	3.5%	0.0%
	2015-2019	0.4%	0.4%	1.3%	0.6%	4.8%	0.2%	3.5%	0.0%
	2016-2020	0.4%	0.4%	1.2%	0.6%	4.9%	0.3%	3.6%	0.0%

*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 the UCLA Luskin Center for Innovation 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.

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent of houses with no fuel used (B25040)	2009-2013	1.9%	0.8%	0.5%	0.3%	0.9%	0.1%	2.9%	0.0%
	2010-2014	2.0%	0.9%	0.6%	0.4%	1.0%	0.1%	3.0%	0.0%
	2011-2015	2.2%	1.0%	0.7%	0.4%	1.0%	0.1%	3.2%	0.0%
	2012-2016	2.0%	0.9%	1.3%	0.6%	1.1%	0.1%	3.3%	0.0%
	2013-2017	2.0%	0.9%	1.4%	0.6%	1.0%	0.1%	3.4%	0.0%
	2014-2018	2.8%	1.3%	1.4%	0.7%	1.0%	0.1%	3.4%	0.0%
	2015-2019	1.7%	0.9%	0.9%	0.5%	0.9%	0.1%	3.3%	0.0%
	2016-2020	0.9%	0.6%	0.7%	0.5%	0.9%	0.2%	3.2%	0.0%

Table A6.3.2: Solar PV Systems per 1,000 Households[17]

Indicator	Dataset Year	Fresno TCC Census Tracts	Control Census Tracts	Fresno County	California
Solar PV Systems for All Building Types	2018	33.5	20.6	82.9	49.4

[17] 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 6.4: Environment

Table A6.4.1: Land-Cover Indicators[13]

Indicator	Dataset Year	Percent area for TCC Project Area	Square Miles
Impervious / buildings	2016	39.1%	2.0
Dry vegetation / barren	2016	29.7%	1.5
Green vegetation	2016	12.0%	0.6
Shadow	2016	9.9%	0.5
Unclassified	2016	9.0%	0.5
Water	2016	0.3%	<0.1

[13] Land-cover indicators were derived from satellite imagery maintained by the National Agriculture Imagery Program (NAIP).

Appendix 6.5: Health

Table A6.5.1: American Community Survey (ACS) Health Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent with health insurance coverage (B27001)	2009-2013	74.4%	1.8%	77.6%	1.6%	80.4%	0.4%	82.2%	0.1%
	2010-2014	75.3%	2.3%	79.2%	1.8%	81.5%	0.4%	83.3%	0.1%
	2011-2015	78.4%	1.8%	81.7%	1.6%	83.6%	0.4%	85.3%	0.1%
	2012-2016	81.0%	2.0%	83.7%	1.3%	85.8%	0.4%	87.4%	0.1%
	2013-2017	83.8%	1.7%	86.3%	1.1%	88.3%	0.4%	89.5%	0.1%
	2014-2018	86.9%	1.7%	89.2%	1.0%	90.5%	0.3%	91.5%	0.1%
	2015-2019	88.4%	1.4%	91.0%	1.1%	91.7%	0.3%	92.5%	0.1%
	2016-2020	88.1%	0.7%	92.2%	1.2%	92.2%	0.3%	92.8%	0.1%
Percent with private health insurance coverage (B27002)	2009-2013	19.5%	1.9%	28.7%	1.8%	48.9%	0.6%	61.0%	0.2%
	2010-2014	20.5%	2.1%	29.4%	2.0%	49.0%	0.6%	60.8%	0.2%
	2011-2015	21.6%	2.0%	30.1%	2.3%	49.4%	0.6%	61.2%	0.2%
	2012-2016	21.7%	2.2%	30.0%	2.3%	49.9%	0.6%	61.8%	0.2%
	2013-2017	23.0%	2.1%	32.6%	2.3%	51.3%	0.6%	62.6%	0.2%
	2014-2018	22.4%	1.9%	32.4%	2.3%	51.7%	0.5%	63.4%	0.2%
	2015-2019	22.8%	1.9%	32.1%	2.5%	52.4%	0.6%	63.8%	0.2%
	2016-2020	22.7%	3.0%	34.0%	2.5%	53.7%	0.6%	64.3%	0.2%
Percent with public health insurance coverage (B27003)	2009-2013	60.5%	2.7%	54.2%	2.9%	40.2%	0.5%	29.5%	0.1%
	2010-2014	59.9%	2.9%	55.7%	2.8%	41.3%	0.4%	30.8%	0.1%
	2011-2015	61.8%	2.5%	58.3%	2.7%	43.1%	0.5%	32.6%	0.1%
	2012-2016	64.5%	2.6%	60.7%	2.4%	45.2%	0.6%	34.3%	0.1%
	2013-2017	66.5%	2.4%	61.2%	2.8%	46.9%	0.5%	35.8%	0.1%
	2014-2018	70.1%	2.8%	64.7%	2.6%	48.7%	0.5%	37.2%	0.1%
	2015-2019	71.8%	2.3%	67.1%	2.6%	49.5%	0.6%	38.0%	0.1%
	2016-2020	71.7%	2.4%	66.8%	3.2%	49.0%	0.6%	38.0%	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 the UCLA Luskin Center for Innovation 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.

Table A6.5.2: Vehicle Collisions Involving Bicyclists and Pedestrians*

Indicator	Dataset Year	Gross Number of Collisions				Normalized per 1,000 Street Miles			
		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	50ft	0ft	50ft
Bicycle Collision at Injury Level 1: Fatal	2020	0	0	1	1	0	0	7.6	7.6
	2019	1	1	1	1	9.4	9.4	7.6	7.6
	2018	0	0	0	0	0	0	0	0
	2017	1	1	1	1	9.4	9.4	7.6	7.6
	2016	0	0	0	0	0	0	0	0
	2015	0	0	0	0	0	0	0	0
	2014	0	1	0	0	0	9.4	0	0
	2013	1	1	0	2	9.4	9.4	0	18.8
Bicycle Collision at Injury Level 2: Severe Injury	2020	0	1	2	3	0	9.4	15.1	22.7
	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	1	1	0	0	9.4	9.4	0	0
	2014	2	2	0	0	18.8	18.8	0	0
	2013	0	0	0	0	0	0	0	0
Bicycle Collision at Injury Level 3: Visible Injury	2020	2	3	0	1	18.8	28.2	0	7.6
	2019	2	2	1	1	18.8	18.8	7.6	7.6
	2018	0	0	0	0	0	0	0	0
	2017	0	0	2	2	0	0	15.1	15.1
	2016	1	1	1	2	9.4	9.4	7.6	15.1
	2015	3	3	4	8	28.2	28.2	30.3	60.6
	2014	4	5	0	0	37.6	47.0	0	0
	2013	2	2	0	0	18.8	18.8	0	0

*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 OpenStreets-Map (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 per 1,000 Street Miles			
		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	50ft	0ft	50ft
Bicycle Collision at Injury Level 4: Complaint of Pain	2020	0	0	1	3	0	0	7.6	22.7
	2019	0	0	2	2	0	0	15.1	15.1
	2018	0	0	0	1	0	0	0	7.6
	2017	0	0	1	2	0	0	7.6	15.1
	2016	2	2	0	0	18.8	18.8	0	0
	2015	3	3	4	8	28.2	28.2	30.3	60.6
	2014	11	12	0	0	103.3	112.7	0	0
	2013	1	1	2	3	9.4	18.8	15.1	22.7
Pedestrian Collision at Injury Level 1: Fatal	2020	2	2	2	4	18.8	18.8	15.1	30.3
	2019	2	2	3	5	18.8	18.8	22.7	37.8
	2018	1	1	4	4	9.4	9.4	30.3	30.3
	2017	3	3	2	5	28.2	28.2	15.1	37.8
	2016	0	0	1	3	0	7.6	0	22.7
	2015	0	0	0	1	0	0	0	7.6
	2014	4	4	0	0	37.6	37.6	0	0
	2013	2	3	1	1	18.8	22.7	7.6	7.6
Pedestrian Collision at Injury Level 2: Severe Injury	2020	2	2	2	5	18.8	18.8	15.1	37.8
	2019	0	0	1	1	0	0	7.6	7.6
	2018	0	0	1	1	0	0	7.6	7.6
	2017	0	0	0	0	0	0	0	0
	2016	1	1	1	1	9.4	9.4	7.6	7.6
	2015	0	0	4	4	0	0	30.3	30.3
	2014	8	9	1	1	75.1	84.5	7.6	7.6
	2013	1	2	1	3	9.4	18.8	7.6	22.7
Pedestrian Collision at Injury Level 3: Visible Injury	2020	3	3	3	10	28.2	28.2	22.7	75.7
	2019	2	2	2	2	18.8	18.8	15.1	15.1
	2018	0	0	1	2	0	0	7.6	15.1
	2017	0	0	1	1	0	0	7.6	7.6
	2016	1	1	3	4	9.4	9.4	22.7	30.3
	2015	3	3	1	2	28.2	28.2	7.6	15.1
	2014	15	16	0	0	140.9	150.3	0	0
	2013	1	1	3	3	9.4	9.4	22.7	22.7

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Indicator	Dataset Year	Gross Number of Collisions				Normalized per 1,000 Street Miles			
		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	50ft	0ft	50ft
Pedestrian Collision at Injury Level 4: Complaint of Pain	2020	3	3	2	4	28.2	28.2	15.1	30.3
	2019	3	3	1	3	28.2	28.2	7.6	22.7
	2018	0	0	0	0	0	0	0	0
	2017	0	0	1	1	0	0	7.6	7.6
	2016	2	2	1	3	18.8	18.8	7.6	22.7
	2015	4	4	5	9	37.6	37.6	37.8	68.1
	2014	11	13	0	0	103.3	122.1	0	0
	2013	2	2	2	2	18.8	18.8	15.1	15.1
Combined Bicycle and Pedestrian Collision at Injury Level 1: Fatal	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	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	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

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Indicator	Dataset Year	Gross Number of Collisions				Normalized per 1,000 Street Miles			
		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	50ft	0ft	50ft
Combined Bicycle and Pedestrian at Injury Level 4: Complaint of Pain	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

Appendix 6.6: Housing

Table A6.6.1: American Community Survey (ACS) Housing Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent renters (B25003)	2009-2013	71.6%	2.7%	68.0%	2.7%	46.2%	0.5%	44.7%	0.1%
	2010-2014	71.0%	2.6%	69.1%	2.5%	46.9%	0.7%	45.2%	0.1%
	2011-2015	70.6%	2.8%	69.8%	2.4%	47.2%	0.6%	45.7%	0.1%
	2012-2016	70.5%	2.7%	71.3%	2.6%	47.5%	0.6%	45.9%	0.2%
	2013-2017	69.2%	2.8%	72.2%	2.5%	47.0%	0.6%	45.5%	0.1%
	2014-2018	69.9%	2.7%	70.4%	2.6%	47.2%	0.5%	45.4%	0.1%
	2015-2019	71.0%	2.7%	70.7%	2.6%	46.7%	0.6%	45.2%	0.1%
	2016-2020	70.7%	4.2%	67.2%	3.1	46.3%	0.7%	44.7%	0.1%
Percent homeowners (B25003)	2009-2013	28.4%	2.5%	32.0%	2.4%	53.8%	0.5%	55.3%	0.3%
	2010-2014	29.0%	2.5%	30.9%	2.2%	53.1%	0.7%	54.8%	0.3%
	2011-2015	29.3%	2.3%	30.2%	2.4%	52.8%	0.5%	54.3%	0.3%
	2012-2016	29.5%	2.4%	28.7%	2.3%	52.5%	0.6%	54.1%	0.3%
	2013-2017	30.8%	2.3%	27.8%	2.2%	53.0%	0.6%	54.4%	0.3%
	2014-2018	30.1%	2.4%	29.6%	2.3%	52.8%	0.5%	54.6%	0.3%
	2015-2019	29.0%	2.2%	29.3%	2.4%	53.3%	0.5%	54.8%	0.3%
	2016-2020	29.3%	3.1%	32.8%	2.8%	53.7%	0.6%	55.3%	0.3%
Percent of households paying ≥30% of income on rent (B25070)	2009-2013	58.4%	4.8%	66.2%	4.8%	54.5%	1.2%	54.1%	0.2%
	2010-2014	60.1%	4.6%	66.1%	4.7%	55.1%	1.1%	54.2%	0.1%
	2011-2015	59.7%	4.6%	67.5%	4.8%	55.0%	1.1%	54.0%	0.1%
	2012-2016	60.4%	4.7%	68.1%	4.4%	55.5%	1.3%	53.6%	0.1%
	2013-2017	59.7%	4.8%	64.0%	4.7%	54.1%	1.1%	53.1%	0.1%
	2014-2018	58.0%	4.7%	65.8%	4.6%	53.6%	1.2%	52.6%	0.2%
	2015-2019	54.9%	4.7%	65.6%	4.7%	53.0%	1.1%	52.1%	0.2%
	2016-2020	61.7%	6.6%	64.6%	5.1%	52.5%	1.4%	51.5%	0.2%
Percent of households paying ≥50% of income on rent (B25070)	2009-2013	35.2%	3.9%	39.9%	3.7%	29.7%	0.9%	28.3%	0.1%
	2010-2014	36.1%	3.5%	40.2%	3.5%	30.5%	0.9%	28.5%	0.1%
	2011-2015	34.6%	3.8%	41.3%	3.5%	29.8%	0.9%	28.2%	0.2%
	2012-2016	33.6%	3.6%	44.0%	3.4%	30.6%	1.1%	27.9%	0.1%
	2013-2017	33.5%	3.8%	42.0%	3.8%	29.8%	0.9%	27.4%	0.1%
	2014-2018	34.0%	3.5%	42.8%	3.7%	29.3%	0.9%	27.0%	0.2%
	2015-2019	32.4%	3.6%	40.8%	3.5%	28.4%	0.7%	26.6%	0.2%
	2016-2020	34.9%	4.7%	35.1%	3.4%	27.0%	1.1%	26.2%	0.2%

*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 the UCLA Luskin Center for Innovation 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.

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent of households paying ≥30% of income on mortgage (B25091)	2009-2013	26.2%	5.6%	29.7%	5.0%	27.9%	0.8%	29.7%	0.1%
	2010-2014	23.5%	5.2%	24.0%	4.6%	26.5%	0.8%	28.5%	0.0%
	2011-2015	24.2%	5.3%	25.1%	4.8%	25.4%	0.8%	27.4%	0.2%
	2012-2016	22.3%	4.5%	20.5%	4.2%	24.0%	0.7%	26.2%	0.2%
	2013-2017	21.3%	4.4%	20.3%	4.5%	22.8%	0.7%	25.3%	0.0%
	2014-2018	23.9%	5.4%	23.1%	4.9%	22.0%	0.7%	24.7%	0.0%
	2015-2019	21.2%	5.4%	25.7%	5.1%	22.0%	0.8%	24.4%	0.0%
	2016-2020							15.4%	0.1%
Percent of households paying ≥50% of income on mortgage (B25091)	2009-2013	4.9%	2.6%	9.9%	3.4%	5.9%	0.4%	7.2%	0.1%
	2010-2014	3.1%	1.7%	8.3%	3.2%	5.6%	0.4%	6.7%	0.0%
	2011-2015	5.0%	2.3%	8.5%	3.2%	5.3%	0.4%	6.2%	0.0%
	2012-2016	6.3%	2.5%	7.2%	2.7%	5.1%	0.4%	5.8%	0.1%
	2013-2017	7.6%	3.0%	6.2%	2.4%	4.8%	0.3%	5.5%	0.1%
	2014-2018	8.3%	3.6%	4.4%	1.9%	4.5%	0.3%	5.4%	0.1%
	2015-2019	7.2%	3.3%	4.7%	2.1%	4.7%	0.3%	5.3%	0.0%
	2016-2020	3.7%	2.6%	3.0%	1.5%	4.4%	0.4%	5.2%	0.1%
Percent of households with more than one occupant per room (B25014)	2009-2013	16.8%	2.5%	16.2%	2.5%	10.2%	0.4%	8.2%	0.1%
	2010-2014	16.4%	2.4%	14.4%	2.2%	10.0%	0.4%	8.2%	0.1%
	2011-2015	15.9%	2.3%	13.1%	2.0%	9.7%	0.4%	8.2%	0.1%
	2012-2016	15.2%	2.2%	12.5%	2.0%	9.5%	0.3%	8.2%	0.1%
	2013-2017	13.9%	2.2%	14.6%	2.2%	9.4%	0.4%	8.2%	0.1%
	2014-2018	14.7%	2.3%	16.6%	2.5%	9.3%	0.4%	8.2%	0.1%
	2015-2019	15.6%	2.5%	16.5%	2.6%	9.4%	0.4%	8.2%	0.1%
	2016-2020	18.6%	3.3%	18.6%	3.4%	9.6%	0.5%	8.2%	0.1%
Percent of households with more than one occupant per room (renters) (B25014)	2009-2013	13.7%	2.3%	13.2%	2.4%	7.3%	0.3%	6.0%	0.0%
	2010-2014	13.2%	2.2%	11.7%	2.0%	7.2%	0.4%	6.0%	0.0%
	2011-2015	12.4%	2.0%	10.9%	1.8%	6.9%	0.3%	6.0%	0.1%
	2012-2016	11.8%	2.0%	10.5%	1.8%	6.7%	0.3%	6.1%	0.0%
	2013-2017	10.3%	1.9%	12.0%	2.1%	6.6%	0.3%	6.0%	0.1%
	2014-2018	11.0%	2.0%	13.5%	2.3%	6.6%	0.3%	6.0%	0.0%
	2015-2019	11.7%	2.3%	13.4%	2.4%	6.6%	0.3%	6.0%	0.1%
	2016-2020	13.5%	2.8%	15.2%	3.2%	6.9%	0.4%	5.9%	0.1%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent of households with more than one occupant per room (homeowners) (B25014)	2009-2013	3.2%	1.0%	3.0%	0.9%	2.9%	0.2%	2.3%	0.0%
	2010-2014	3.1%	1.0%	2.7%	1.0%	2.8%	0.2%	2.2%	0.0%
	2011-2015	3.6%	1.0%	2.2%	0.9%	2.7%	0.2%	2.2%	0.0%
	2012-2016	3.4%	1.0%	2.0%	0.9%	2.7%	0.2%	2.1%	0.0%
	2013-2017	3.7%	1.1%	2.6%	0.9%	2.8%	0.2%	2.2%	0.0%
	2014-2018	3.7%	1.0%	3.1%	1.1%	2.7%	0.2%	2.2%	0.0%
	2015-2019	3.9%	1.2%	3.1%	1.0%	2.8%	0.2%	2.2%	0.0%
	2016-2020	5.1%	1.8%	3.4%	1.2%	2.8%	0.2%	2.3%	0.0%
Percent of households in same house 1 year ago (renters) (B07013)	2009-2013	56.4%	3.8%	52.5%	3.9%	35.5%	0.6%	32.7%	0.2%
	2010-2014	54.0%	3.4%	54.0%	3.2%	36.0%	0.7%	33.7%	0.2%
	2011-2015	52.5%	3.3%	51.8%	3.2%	36.3%	0.6%	34.7%	0.2%
	2012-2016	52.4%	3.4%	51.5%	3.2%	36.8%	0.5%	35.4%	0.2%
	2013-2017	52.0%	3.3%	53.6%	3.3%	36.6%	0.7%	35.6%	0.2%
	2014-2018	53.1%	3.7%	53.0%	3.2%	37.0%	0.7%	35.8%	0.2%
	2015-2019	54.9%	3.7%	52.1%	3.3%	37.1%	0.6%	35.9%	0.2%
	2016-2020	57.7%	4.6%	54.0%	4.0%	37.5%	0.8%	35.6%	0.2%
Percent of households in same house 1 year ago (homeowners) (B070103)	2009-2013	27.1%	2.7%	28.5%	2.4%	48.7%	0.6%	52.3%	0.3%
	2010-2014	28.2%	2.8%	27.3%	2.5%	48.2%	0.8%	51.7%	0.3%
	2011-2015	29.1%	2.8%	26.6%	2.6%	47.9%	0.6%	51.3%	0.3%
	2012-2016	29.8%	2.7%	25.1%	2.6%	47.7%	0.6%	51.0%	0.3%
	2013-2017	32.0%	2.7%	25.0%	2.4%	48.5%	0.7%	51.4%	0.2%
	2014-2018	31.6%	2.8%	28.1%	2.6%	48.7%	0.7%	51.6%	0.2%
	2015-2019	31.6%	3.1%	28.4%	3.0%	49.3%	0.7%	52.0%	0.3%
	2016-2020	31.5%	4.0%	31%	3.1%	50.2%	0.8%	52.7%	0.2%
Percent of households in same house 1 year ago (w/ income of ≥ $75k) (B07010)	2009-2013	0.7%	0.3%	1.6%	0.5%	7.0%	0.2%	12.1%	0.1%
	2010-2014	0.8%	0.3%	1.6%	0.5%	6.9%	0.2%	12.3%	0.1%
	2011-2015	1.0%	0.4%	1.7%	0.5%	7.0%	0.2%	12.4%	0.1%
	2012-2016	1.2%	0.4%	1.8%	0.5%	7.4%	0.2%	13.0%	0.1%
	2013-2017	1.0%	0.3%	2.5%	0.7%	8.1%	0.2%	13.8%	0.1%
	2014-2018	1.2%	0.4%	2.7%	0.7%	8.8%	0.2%	14.8%	0.1%
	2015-2019	1.7%	0.5%	2.7%	0.7%	9.7%	0.2%	16.0%	0.1%
	2016-2020	1.6%	0.6%	3.5%	1.0%	10.5%	0.3%	16.8%	0.1%

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent of households in same house 1 year ago (w/ income of <$75k) (B07010)	2009-2013	77.5%	2.0%	80.0%	2.1%	77.4%	0.7%	72.2%	0.1%
	2010-2014	76.7%	2.2%	79.7%	2.5%	77.5%	0.7%	72.5%	0.1%
	2011-2015	74.9%	2.2%	76.9%	2.4%	77.2%	0.7%	72.9%	0.1%
	2012-2016	74.1%	2.2%	75.7%	2.5%	76.9%	0.7%	72.8%	0.1%
	2013-2017	76.2%	1.8%	76.6%	2.3%	76.7%	0.7%	72.4%	0.1%
	2014-2018	76.7%	2.1%	78.9%	2.3%	76.5%	NA	71.8%	0.1%
	2015-2019	78.7%	2.2%	78.8%	2.6%	76.4%	0.7%	71.0%	0.1%
	2016-2020	81.7%	7.3%	81.8%	0.4%	76.8%	0.8%	70.6%	0.1%
Percent of housing units for rent that are vacant (B25002 and B25004)	2009-2013	5.8%	1.4%	5.5%	1.4%	2.9%	0.3%	2.1%	0.0%
	2010-2014	5.6%	1.5%	5.7%	1.4%	2.8%	0.2%	2.0%	0.0%
	2011-2015	6.1%	1.5%	4.4%	1.2%	2.4%	0.2%	1.8%	0.0%
	2012-2016	5.6%	1.3%	4.0%	1.1%	2.1%	0.2%	1.7%	0.0%
	2013-2017	5.3%	1.4%	3.0%	0.9%	1.8%	0.2%	1.6%	0.0%
	2014-2018	4.8%	1.4%	2.2%	0.8%	1.6%	0.2%	1.5%	0.0%
	2015-2019	4.7%	1.6%	1.4%	0.6%	1.5%	0.2%	1.6%	0.0%
	2016-2020	1.8%	1.0%	1.3%	0.7%	1.5%	0.2%	1.6%	0.0%
Percent of housing units for sale that are vacant (B25002 and B25004)	2009-2013	1.0%	0.6%	0.3%	0.4%	1.0%	0.2%	0.9%	0.0%
	2010-2014	1.0%	0.7%	0.3%	0.4%	0.8%	0.2%	0.8%	0.0%
	2011-2015	1.0%	0.6%	0.0%	0.1%	0.7%	0.1%	0.7%	0.0%
	2012-2016	0.8%	0.6%	0.0%	0.1%	0.6%	0.1%	0.6%	0.0%
	2013-2017	0.7%	0.5%	0.0%	0.1%	0.6%	0.1%	0.6%	0.0%
	2014-2018	0.8%	0.6%	0.0%	0.1%	0.6%	0.1%	0.6%	0.0%
	2015-2019	0.8%	0.6%	0.1%	0.2%	0.6%	0.1%	0.6%	0.0%
	2016-2020	0.9%	0.8%	0.1%	0.2%	0.7%	0.1%	0.5%	0.0%

Appendix 6.7: Transportation

Table A6.7.1: American Community Survey (ACS) Transportation Indicators*

	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent of households with a vehicle available (B08201)	2009-2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2010-2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2011-2015	N/A	N/A	N/A	N/A	91.0%	0.9%	92.3%	0.1%
	2012-2016	N/A	N/A	N/A	N/A	90.9%	0.9%	92.4%	0.1%
	2013-2017	N/A	N/A	N/A	N/A	91.3%	0.9%	92.6%	0.1%
	2014-2018	N/A	N/A	N/A	N/A	91.5%	1.0%	92.8%	0.1%
	2015-2019	N/A	N/A	N/A	N/A	91.7%	0.9%	92.9%	0.1%
	2016-2020	N/A	N/A	N/A	N/A	92.1%	1.1%	93.0%	0.1%
Percent of workers commuting to work alone by car (B08301)	2009-2013	61.1%	2.5%	70.2%	2.5%	77.0%	0.6%	73.2%	0.1%
	2010-2014	62.7%	2.6%	71.1%	1.6%	77.0%	0.4%	73.2%	0.1%
	2011-2015	64.1%	2.7%	71.0%	2.4%	76.9%	0.4%	73.4%	0.1%
	2012-2016	65.7%	3.0%	68.8%	2.0%	77.0%	0.6%	73.5%	0.0%
	2013-2017	64.8%	2.9%	69.8%	2.1%	78.1%	0.7%	73.6%	0.1%
	2014-2018	65.8%	2.9%	71.9%	2.7%	78.5%	0.7%	73.7%	0.0%
	2015-2019	67.5%	3.7%	73.0%	2.7%	78.5%	0.6%	73.7%	0.0%
	2016-2020	65.0%	3.9%	76.1%	2.4%	78.3%	0.6%	72.1%	0.1%
Percent of workers commuting to work by carpool (B08301)	2009-2013	15.8%	3.5%	12.8%	2.7%	12.2%	0.5%	11.3%	0.1%
	2010-2014	14.9%	3.4%	11.9%	2.3%	12.5%	0.5%	11.1%	0.1%
	2011-2015	15.6%	3.4%	14.8%	2.7%	12.8%	0.6%	10.8%	0.1%
	2012-2016	15.1%	3.3%	16.8%	3.4%	12.8%	0.5%	10.6%	0.1%
	2013-2017	17.4%	3.2%	15.2%	3.1%	12.2%	0.6%	10.4%	0.1%
	2014-2018	16.7%	2.9%	13.4%	2.7%	12.0%	0.5%	10.3%	0.1%
	2015-2019	17.8%	2.9%	13.2%	2.5%	12.2%	0.5%	10.1%	0.1%
	2016-2020	21.3%	4.1%	11.5%	2.5%	11.9%	0.6%	10.0%	0.1%
Percent of workers commuting to work by public transit (B08301)	2009-2013	4.4%	1.4%	3.4%	1.2%	1.2%	0.1%	5.2%	0.0%
	2010-2014	3.5%	1.1%	4.2%	1.3%	1.3%	0.2%	5.2%	0.0%
	2011-2015	4.2%	2.1%	4.5%	1.5%	1.3%	0.2%	5.2%	0.0%
	2012-2016	3.5%	1.6%	4.9%	1.7%	1.3%	0.1%	5.2%	0.0%
	2013-2017	4.0%	1.8%	5.0%	1.8%	1.2%	0.1%	5.2%	0.0%
	2014-2018	3.2%	1.6%	4.8%	1.5%	1.2%	0.1%	5.1%	0.0%
	2015-2019	3.2%	1.4%	3.5%	1.3%	1.1%	0.1%	5.1%	0.0%
	2016-2020	1.9%	1.2%	3.2%	1.1%	0.9%	0.1%	4.6%	0.0%

*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 the UCLA Luskin Center for Innovation 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.

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	Time Period (ACS 5-year sample)	Estimate for TCC Tracts	MOE	Estimate for Control Tracts	MOE	Estimate for Fresno County	MOE	Estimate for California	MOE
Percent of workers commuting to work by foot (B08301)	2009-2013	2.9%	1.3%	2.8%	1.4%	2.1%	0.2%	2.7%	0.0%
	2010-2014	2.8%	1.3%	2.1%	1.0%	2.1%	0.2%	2.7%	0.0%
	2011-2015	1.9%	0.9%	1.8%	0.7%	1.9%	0.2%	2.7%	0.0%
	2012-2016	1.8%	0.8%	2.0%	0.8%	1.7%	0.1%	2.7%	0.0%
	2013-2017	2.1%	0.9%	2.5%	1.0%	1.6%	0.2%	2.7%	0.0%
	2014-2018	2.0%	0.8%	2.7%	0.9%	1.7%	0.2%	2.7%	0.0%
	2015-2019	1.3%	0.7%	2.8%	1.0%	1.6%	0.2%	2.6%	0.0%
	2016-2020	2.3%	1.4%	2.3%	0.8%	1.5%	0.1%	2.5%	0.0%
Percent of workers commuting to work by bike (B08301)	2009-2013	0.9%	0.7%	2.5%	1.0%	0.8%	0.1%	1.1%	0.0%
	2010-2014	1.4%	0.8%	2.2%	0.9%	0.8%	0.1%	1.1%	0.0%
	2011-2015	1.6%	0.8%	1.3%	0.6%	0.9%	0.1%	1.1%	0.0%
	2012-2016	1.5%	0.9%	0.8%	0.5%	0.9%	0.1%	1.1%	0.0%
	2013-2017	1.5%	0.9%	0.5%	0.4%	0.7%	0.1%	1.1%	0.0%
	2014-2018	1.6%	0.9%	0.3%	0.4%	0.6%	0.1%	1.0%	0.0%
	2015-2019	1.4%	0.9%	0.5%	0.4%	0.5%	0.1%	1.0%	0.0%
	2016-2020	1.1%	0.8%	0.3%	0.3%	0.4%	0.1%	0.8%	0.0%
Percent of workers commuting to work by other modes: taxicab, motorcycle, and other (B08301)	2009-2013	9.5%	4.5%	5.3%	2.3%	2.7%	0.3%	1.3%	0.0%
	2010-2014	10.7%	3.3%	4.7%	2.3%	2.4%	0.2%	1.3%	0.0%
	2011-2015	9.4%	2.4%	3.3%	1.4%	2.0%	0.2%	1.4%	0.0%
	2012-2016	7.8%	2.1%	2.6%	1.2%	2.0%	0.2%	1.4%	0.0%
	2013-2017	5.9%	1.6%	2.4%	1.0%	1.8%	0.2%	1.5%	0.0%
	2014-2018	5.0%	1.6%	2.2%	0.9%	1.7%	0.2%	1.6%	0.0%
	2015-2019	2.6%	1.1%	2.2%	0.9%	1.5%	0.2%	1.6%	0.0%
	2016-2020	2.4%	1.5%	1.4%	0.7%	1.2%	0.2%	1.6%	0.0%

Table A6.7.2: Plug-in Electric Vehicle (PEV) Registrations [14]

Indicator	Dataset Year	Gross Number			Normalized per 10,000 Residents		
		TCC Census Tracts	Control Census Tracts	Fresno County	TCC Census Tracts	Control Census Tracts	Fresno County
Battery electric vehicle (BEV)	2020	61	31	2,934	18.8	6.4	29.6
	2019	48	27	2,577	12.1	5.4	26.2
	2018	31	27	2,218	7.7	5.3	22.7
	2017	28	25	1,919	7.2	5.1	19.8
	2016	23	16	1,361	5.8	3.3	14.1
	2015	16	6	870	4.1	1.2	9.1
Plug-in hybrid electric vehicle (PHEV)	2020	48	41	2,112	14.8	8.4	21.3
	2019	28	36	1,638	7.0	7.2	16.6
	2018	18	20	1,168	4.5	3.9	11.9
	2017	7	14	535	1.8	2.9	5.5
	2016	8	7	450	2.0	1.5	4.7
	2015	7	6	317	1.8	1.2	3.3
Fuel cell vehicle (FCEV)	2020	0	0	0	0	0	0
	2019	0	0	0	0	0	0
	2018	0	0	0	0	0	0
	2017	0	0	0	0	0	0
	2016	0	0	0	0	0	0
	2015	0	0	0	0	0	0
Total electric vehicle (EV) registration	2020	109	72	5,046	33.6	14.8	51.0
	2019	76	63	4,215	19.2	12.6	42.8
	2018	49	47	3,386	12.2	9.3	34.6
	2017	35	39	2,454	9.0	8.0	25.2
	2016	31	23	1,811	7.9	4.8	18.8
	2015	23	12	1,187	5.9	2.5	12.4

[14] EV registration data were obtained by request from the California Air Resources Boards (CARB) Online Fleet Database. The EV registration data were normalized with 2017 and 2015 five-year ACS data.

Table A6.7.3: Publicly Available Charging Infrastructure[15]

Indicator	Dataset Year	Gross Number			Normalized per 10,000 Residents		
		TCC Census Tracts	Control Census Tracts	Fresno County	TCC Census Tracts	Control Census Tracts	Fresno County
Level 2 Stations	2021	27	6	272	8.3	1.2	2.8
	2020	6	2	99	1.5	0.4	1.0
	2019	2	1	51	0.5	0.2	0.5
	2018	3	1	41	0.8	0.2	0.4
	2017	3	0	42	0.8	0	0.4
	2016	2	0	15	0.5	0	0.2
	2015	1	0	8	0.3	0	0.1
DC Fast-Charging Stations	2021	5	0	42	1.5	0	0.4
	2020	1	1	21	0.3	0.2	0.2
	2019	1	0	13	0.3	0	0.1
	2018	0	0	11	0	0	0.1
	2017	0	0	10	0	0	0.1
	2016	0	0	10	0	0	0.1
	2015	0	0	4	0	0	<0.1

[15] 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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