TRANSFORM FRESNO

2021 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.

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Cover image: A construction crew working on the foundation of The Monarch @ Chinatown, Transform Fresno's affordable housing project (Photo credit: Fresno Housing Authority).

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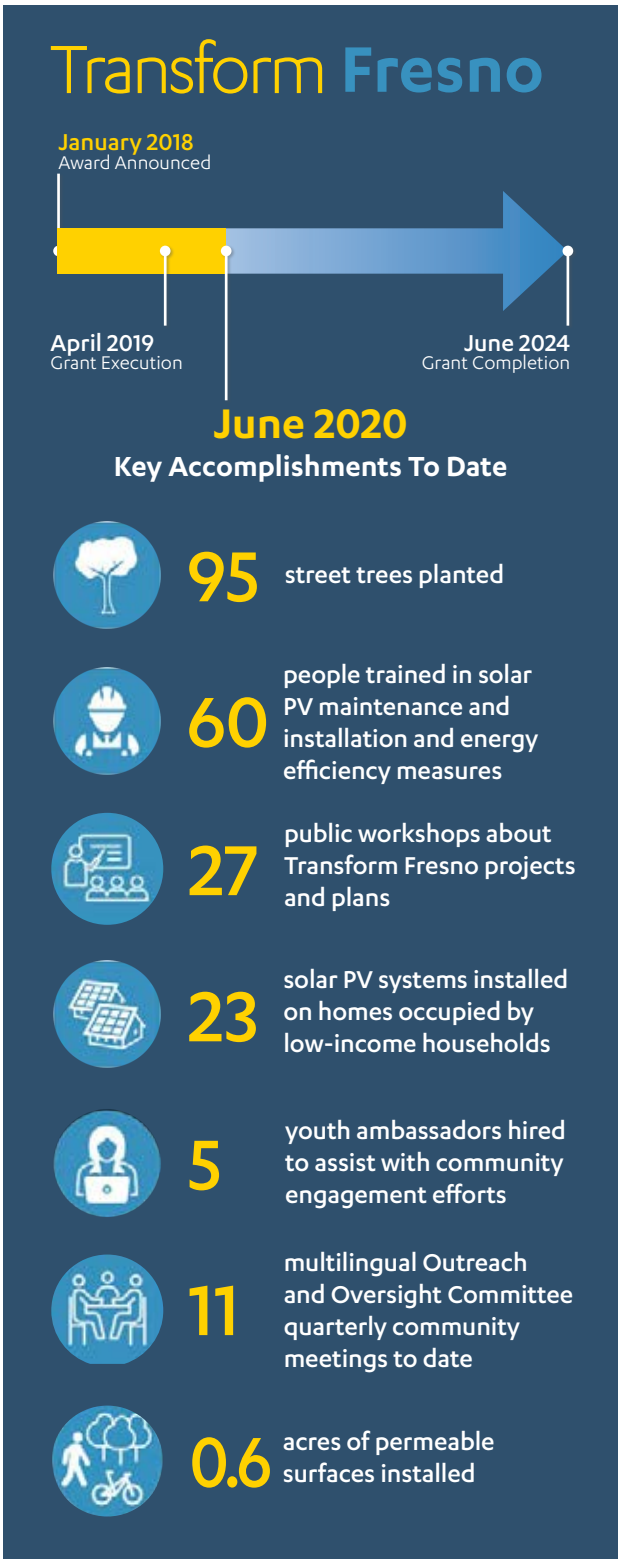
EXECUTIVE SUMMARY

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

The California Strategic Growth Council (SGC) serves as the lead administrator of TCC. During the first round of the program, and through a competitive process, SGC awarded multimillion-dollar 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 the City of Sacramento ($23 million) and the Pacoima, Northeast San Fernando Valley neighborhood of Los Angeles ($23 million). And during the third and most recent round, SGC awarded 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 second 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 2019-20, which overlaps with about 15 months of program implementation (April 2019 through June 2020) and the first four months of the COVID-19 pandemic. Project partners' responses to the pandemic are highlighted throughout the report.



[1] For annual reports that document TCC investments in Ontario and Watts, visit: https://innovation.luskin.edu/climate/climate-investments

Community members, leaders, and organizers advocated for TCC funds to be invested in Southwest Fresno at a Strategic Growth Council meeting in Sacramento on April 4, 2017. Photo credit: Leadership Counsel for Justice and Accountability

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 (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 free 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.

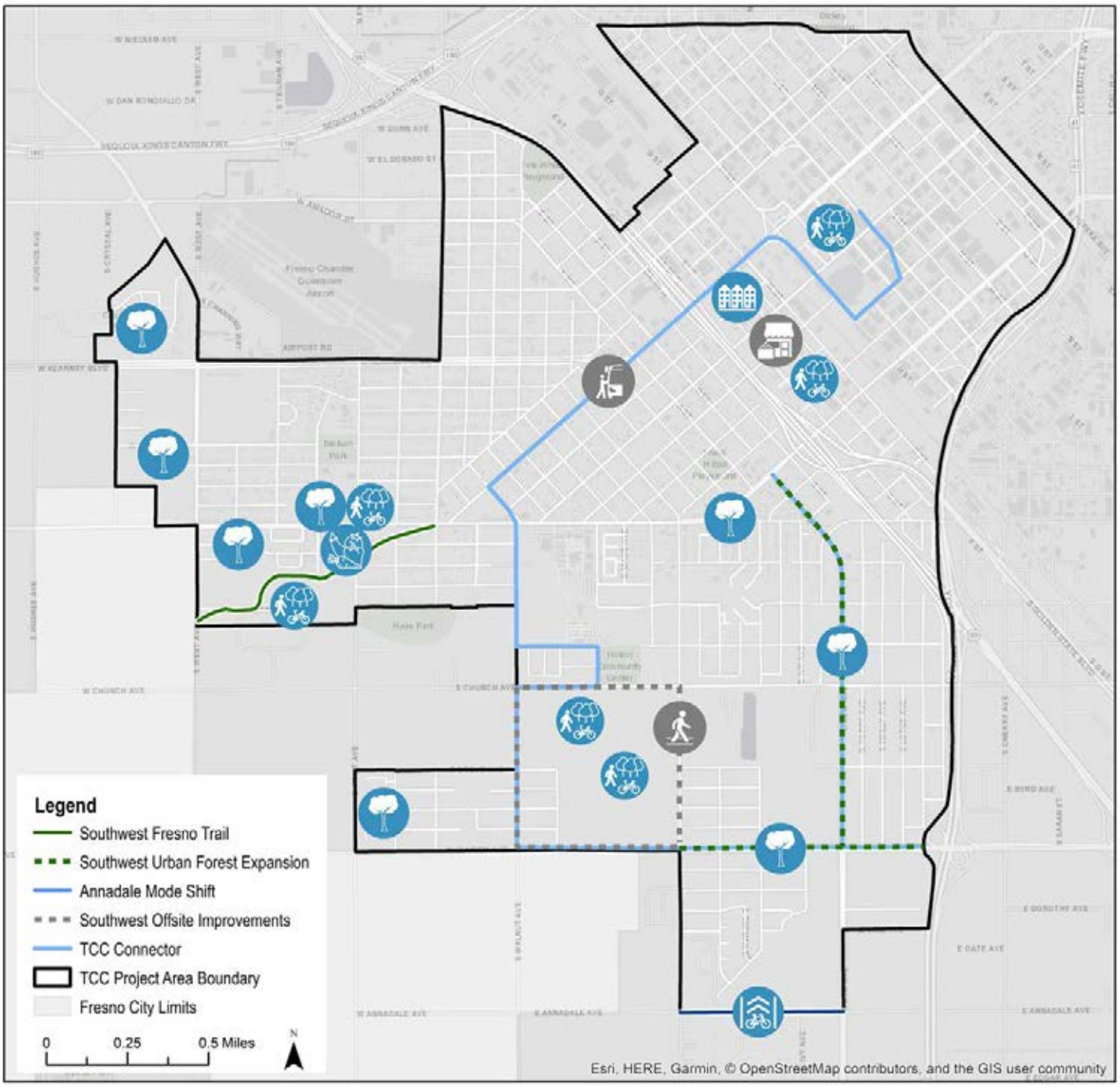
Transformative Plans

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 disadvantaged and low-income communities, and minimize the risk of gentrification and displacement of existing residents and businesses. Transform Fresno's plans have the following overarching goals:

Community Engagement Plan	Workforce Development Plan	Displacement Avoidance Plan
» Institutionalize opportunities for residents to participate in the planning and governance of TCC implementation » Continue to build civic engagement while fostering the next generation of community leaders	» Connect residents with training and educational opportunities that provide them with new skills » Place residents in employment opportunities on TCC and leveraged projects	» Preserve the supply of affordable housing, neighborhood stabilization and wealth building » Protect tenure of existing residents » Retain and grow the local small-business community

Figure 1. Project Area Map With Locations of Projects*



***See the previous page for information about what each project icon represents. This map does not include projects or plans that are sitewide (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
- **5,149,183** gallons in avoided stormwater runoff
- **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. Totals reported here reflect revisions to project-level work plans completed after the release of the California Climate Investments 2020 Annual Report, which would explain any discrepancies between this report and that report. 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).

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 city.

The June 11, 2020 Outreach and Oversight Committee quarterly community meeting was held virtually via Zoom due to COVID-19. Photo credit: Community Media Access Collaborative (CMAC TV)

Much has happened following SGC's announcement of Transform Fresno's TCC award in 2018. Through the close of the 2018-2019 fiscal year (June 30, 2019), project partners have refined plans, built both capacity and governance structures, and taken the initial steps necessary for implementing an ambitious, unprecedented climate action initiative. These accomplishments are described in more detail below according to the time in which they occurred.

Post-Award Process (January 2018 – April 2019)

Laying the Foundation for Grant Success

In 2018, SGC announced that Transform Fresno was awarded a Round 1 TCC grant. This kicked off a process known as post-award consultation in which SGC and the City of Fresno participated in a comprehensive review of all projects and transformative plans to ensure that they were in compliance with TCC guidelines, and more broadly that the foundation was laid to maximize implementation success. Specific outcomes from the post-award consultation process include:

- **The development of an evaluation plan for tracking the outputs and outcomes from each project and transformative plan;**
- **Establishing a collaborative advisory and governance structure made up of residents, property owners, and local businesses in the project area; and**
- **An executed grant agreement with clearly defined work plans, deliverables, and reporting expectations for each project and plan.**

Post-Grant Execution (April 2019 – June 2020)

Broke Ground on GHG Reduction Projects

After the City of Fresno executed its grant agreement with SGC on April 3, 2019, the post-award consultation phase ended and grant implementation began. Before GHG reduction projects could officially start spending TCC funds, they were each required to meet SGC's project readiness requirements (e.g., completing necessary California Environmental Quality Act documentation, obtaining permits, finalizing project maps and designs, developing operations and maintenance plans, etc). During the first 15 months of implementation, 13 of Transform Fresno's 17 TCC funded projects successfully achieved project readiness. This process takes longer for some projects, so while not all projects officially broke ground during the reporting period, many are well underway: single-family solar and weatherization projects, multifamily solar projects, and urban forestry projects. Notable implementation milestones for these projects include:

- **100 kW of solar PV installed on single-family homes and 21 kW installed on multifamily developments;**
- **50 individuals trained on rooftop solar PV installation and maintenance;**
- **12 individuals trained on single-family home weatherization and energy efficiency measures;**
- **26,800 square feet of permeable surfaces installed;**
- **95 trees and 480 native plants planted; and**
- **95 new garden plots and 3 new farm plots constructed.**

Operationalized Transformative Plans

All three of Transform Fresno's transformative plans were put into practice during the reporting period. These plans leverage a number of initiatives already underway in Fresno. The Community Engagement Plan, for example, is partnering with the Youth Leadership Institute to train the next generation of youth ambassadors and involve more young people in all aspects of project and plan implementation. The Workforce Development Plan 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. In particular, FRWDB is supporting the implementation of th e West Fresno Advanced Transportation Technology Training (WFATT) program. For the welding pre-apprenticeship element of the WDP, the Voice of Including Community Equitably (VOICE) will partner with the State Center Community College District (SCCCD) to utilize classroom space, equipment, 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. Last, the Displacement Avoidance Plan leverages the ongoing work of the Fresno Housing Authority to augment the local supply of affordable housing in the community. Furthermore, 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. The integration of these leveraged activities into Transform Fresno's transformative plans are reflected in many of the accomplishments enumerated in this report, which often refer back to established programs or projects that predate TCC.

With respect to community engagement, key accomplishments during the reporting period include:

- **12 convenings of the Outreach and Oversight (O&O) Committee, an advisory and grant governance body composed of 16 community leaders representing Downtown, Chinatown, and Southwest Fresno;**
- **4 multilingual O&O Committee quartlery community meetings, where project partners provide updates to on project implementation status, progress, milestones, and upcoming events;**
- **5 youth ambassadors hired and trained on community engagement and outreach methods through the Youth Leadership Development Program;**
- **27 informational workshops about Transform Fresno projects and plans (14 on rooftop solar and energy efficiency; 12 on urban forestry; and 1 on bike safety);**
- **1 in-person Bike Safe Fresno event in 2019 held by the US Green Business Council - Central California; and**
- **The CEP was 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.**

Workforce development accomplishments include:

- **Subgrant agreement between the West Fresno Advanced Transportation Technology Training and the City of Fresno executed in June 2020;**
- **Subgrant agreement between the City of Fresno and VOICE Gladiators in development; and**
- **Subgrant agreement for the City of Fresno's WDP Administration in development.**

Displacement avoidance accomplishments include:

- **Subgrant agreement between the City of Fresno and Thrivance Group executed in April 2020; and**
- **1 convening of the Anti Displacement Task Force.**

Responded to COVID-19 Pandemic

After the COVID-19 pandemic hit, many of Transform Fresno's various projects and transformative plans had to halt implementation to mitigate community spread of the virus. Transform Fresno project partners quickly regrouped and identified which project components should be postponed and which could be modified to employ physical distancing protocols. Notable implementation pivots include:

- **Community engagement programming, including quarterly Outreach and Oversight Committee community meetings, moved to a virtual environment (Zoom) and were recorded for wider dissemination;**
- **GRID Alternatives and Fresno EOC received applications for rooftop solar virtually or via phone, modified site visit procedures to minimize client contact, and continued installing solar PV with physical distancing and masks among all crew members;**
- **The Inside Out Community Garden gave virtual cooking demonstrations using ingredients from the planter boxes and participated in community food giveaways in May and June of 2020; and**
- **Construction, volunteer days, and resident planting and gardening continued at the Yosemite Village Permaculture Community Garden & Urban Farm Incubator at limited capacity, with social distancing and masks.**

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 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 California Department of Conservation (DOC), with collaboration by other state agencies. SGC staff coordinate 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 Proposition 84 funds.

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 to planning grants. Table 1 provides an overview of the implementation and planning grants that have been distributed through FY 2019-2020.

Table 1: Overview of TCC Implementation and Planning Grants Through FY 2019-2020

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	$90k
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	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	Round 3 (FY 2019-2020)	Implementation	$9.1 million
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 sites.[5] 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. 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.

The Round 1 Evaluation Plan was developed in close consultation with the TCC Round 1 sites. To qualify for TCC funding, TCC applicants had to identify performance indicators associated with each proposed project type and transformative plan. The UCLA-UCB evaluation team then worked with the awarded grantees to refine their indicator tracking plans to ensure that they aligned with their project goals. To do so, the evaluator developed project-specific and plan-specific logic models in collaboration with the grantees. Logic models are a helpful evaluation tool that illustrate all of the interim steps that must occur for a project or plan to realize its intended goals. These steps, within the context of TCC, are defined as follows:

- **Inputs:** The investment dollars and leveraged funds that support TCC
- **Activities:** The work of the TCC grantees and co-applicants
- **Outputs:** The products and services that the TCC projects produce and deliver
- **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 and goals of TCC

[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

The latter four steps in the framework described above are treated as performance indicators that will be quantified and tracked over a five-year period (2019-2024) for the purposes of program evaluation. The Round 1 evaluation plan for TCC summarizes the final list of indicators adopted by SGC for TCC evaluation and the methods for tracking those indicators.[6] Indicator tracking responsibilities are split among the UCLA-UCB evaluation team and the grantees. In general, all output related indicators will be tracked over time by the grantees, while most outcome and impact related indicators will be tracked by the UCLA-UCB evaluation team.

It is important to note that it could take a generation for many of the transformative impacts of TCC investment to show up in secondary data. Trees, for example, can take 40 years to grow to maturity. Similarly, the transition to a new, higher-paying career can take decades of education and skill building to achieve. Thus, at the end of the relatively short five-year evaluation period, changes in the impact indicators may be too small to draw any statistically valid conclusions about indicator changes at the selected sites. Nonetheless, the UCLA-UCB evaluation team will update impact indicators annually for the sake of maintaining a complete time series, which will be helpful for developing trend lines over the long run that show the directionality of impact indicators. See Appendix 6 for the latest indicator data the UCLA-UCB has collected.

Methods for Evaluating TCC

The TCC Program Evaluation Plan includes two different modes of comparison. First, the UCLA-UCB evaluation team will measure changes in indicators in the TCC sites before and after the influx of TCC investments (before and after comparison). When possible, the UCLA-UCB evaluation team constructed a five-year pre-investment trend line prior to implementation kickoff (2014-2018) and will construct a five-year post-kickoff trend line (2019-2023). Second, the UCLA-UCB evaluation team will conduct the same before and after comparison for a set of control sites to isolate the effect of TCC investment from larger social, economic, and environmental forces. These control sites are individual census tracts that are similar to their respective TCC sites along a number of dimensions, including socioeconomic demographics, climate, and pollution burden (as demonstrated by their CalEnviroScreen scores).[7]

In addition to measuring changes within the TCC sites and a set of control sites, the UCLA-UCB evaluation team will also look at changes at the county and state level for a select set of indicators that speak to social equity (e.g., income, employment, housing costs, etc.). Tracking social equity indicators in these larger surrounding geographies will allow the evaluator to assess the degree to which TCC has helped reduce the economic gaps that exist in TCC sites relative to nearby communities.

In summary, the UCLA-UCB evaluation team is collecting data at four geographic scales to assist with evaluating the effects of TCC:

- **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 can not 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, including socioeconomic demographics, climate, and pollution burden, but that did not receive TCC investment. Collecting before and after data for the control sites will help control for external forces such as broader trends that could also explain the changes in environmental, health, and economic conditions observed in the three awarded 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 situated (Fresno County in this report). County-scale measurements are helpful for understanding the degree to which TCC investments are addressing social equity concerns.
- **State:** The state in which TCC sites are situated (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.

When possible, the UCLA-UCB evaluation team will track indicators for the TCC project area and at the scale of the control sites, county, and state. However, a number of indicators do not easily lend themselves to measurement for the latter three geographies. Many of the indicators tracked by the UCLA-UCB evaluation team rely on primary data (e.g., transit ridership, business retention, compost production, etc.) that would be cost-prohibitive or tech-

[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

nically infeasible to obtain at the same level of detail for control sites, the county, or the state. Even when secondary data are available, it may not be prudent to use limited evaluation resources to analyze indicators at all four scales. For example, accessibility indicators will be tracked for both TCC sites and control sites, but not at the county and state scale because of the processing time associated with running network analyses in ArcGIS. Furthermore, some indicators must be estimated because they are tied to specific project activities and cannot be reliably obtained from either primary or secondary data (e.g., GHG reductions, energy and travel cost-savings, indirect and induced jobs, etc.). In these cases, estimates will be provided only for the TCC sites.

Evaluation Summary Through June 2020

In the months after TCC grantees executed their contracts, the UCLA-UCB evaluation team worked with the grantees to operationalize a number of indicator tracking protocols. Specifically, the UCLA-UCB 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 UCLA-UCB 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 for the first year that includes the post award period and the three months of implementation after grant execution.

By the end of 2019, the UCLA-UCB evaluation team also 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 continue to be updated on an annual basis through the end of 2023.

With respect to qualitative data collection, the UCLA-UCB evaluation team began the process of testing and refining qualitative data collection instruments (i.e., surveys, interview guides, and focus group scripts).[8] The UCLA-UCB evaluation substantially revised the instruments from the original versions posted in the 2018 evaluation plan, improving their legibility and reducing their completion time.

In fall 2019, the UCLA-UCB evaluation started disseminating final versions of the community engagement and workforce development surveys in Fresno. The surveys were made available in both English and Spanish. 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.

Evaluation Activities for the Coming Year

During the third year of program implementation, the UCLA-UCB evaluation team will start conducting focus groups. The groups will focus on the topic of displacement. For each TCC site, there will be two focus groups; one with representatives from community based organizations that work on housing issues, and one with representatives of the business community. This is a departure from the 2018 evaluation plan in that a third focus group with local public officials will be replaced by interviews with those individuals, which will allow a greater range of topics to be covered. Focus group participants will be recruited in collaboration with TCC project partners. All focus groups will be conducted in a virtual environment. As with the survey data, the data collected during focus groups will be analyzed toward the end of the five-year evaluation period in the context of the full suite of qualitative data that will be gathered during the evaluation.

[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

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

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 been formed or have continued the legacy of community engagement in the TCC project area to address 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 (Collaborative), which formed in 2017 during the development of Fresno's TCC application. Over the course of 90 days (July through October 2017), 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 164 community members were eligible to vote at the final Steering Committee meeting. One hundred and twenty-six voting members 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 of Fresno'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.

In early 2018, Transform Fresno was selected by SGC for a TCC grant of $66.5 million. Transform Fresno will also leverage $117.3 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 2019-2020. This baseline and initial evaluation period overlaps with about 13 months of post-award consultation and 15 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; Wells Fargo	$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	$20,000
	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	$18,994,761
		The City of Fresno*	$977,902	$0
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	$0
Low Carbon Transportation	Clean Shared Mobility Network	Fresno Metro Black Chamber of Commerce;* San Joaquin Valley Latino Environmental Advancement and Policy; Inspiration Transportation; Shared use Mobility Center; Bethel Temple Early Readers Preschool	$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	$0
	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**			**$65,856,248**	**$114,059,355**

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

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

Fresno residents gathered at the West Side Church of God in 2017 to vote on the final package of Transform Fresno projects. The chosen project package was overwhelmingly approved. Photo credit: Leadership Counsel for Justice and Accountability

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. More recently, the City of Fresno hired a full-time staff member to manage program implementation and executed contracts with three partner organizations (Fresno EOC, Thrivance Group, and Youth Leadership Institute) to facilitate engagement throughout the implementation of Transform Fresno projects.

Key Accomplishments*

- Transform Fresno project package (125-1) approved by committee members in 2018;
- 11 multilingual O&O Committee quarterly community meetings held since 2018, with 30-60 stakeholders engaged at each;
- 120 community members engaged at five pop-up workshops conducted by the consultant Raimi & Associates Inc. 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;

* From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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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.

Community members will 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 will be able to 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 will strive 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 will provide transparency, continue to build trust within the community, and expand and institutionalize civic engagement. The multifaceted CEP, with its collaborative and capacity-building activities, will be integral to achieving the change desired by the Transform Fresno initiative.

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.

In 2019, the City of Fresno issued a request for qualifications for community partner agencies to carry out specific tasks and roles in the CEP. The City of Fresno executed subgrant contracts with three organizations in 2020, including Fresno EOC, Youth Leadership Institute, and Thrivance Group. Fresno EOC will serve as the Prime Community Partner, as well as the Direct Outreach, Media and Communications, and Event Coordination Partner. The Youth Leadership Institute will serve as the Leadership Development Community Partner, and Thrivance Group is the Data and Reporting Community Partner.

Key Accomplishments

(Continued)

- 1 hands-on bicycle workshop held by the USGBC-CC in November 2019
- 3 contracts executed with community partner organizations (Fresno EOC, Youth Leadership Institute, and Thrivance Group) in 2020
- 5 youth ambassadors hired and trained under the Youth Leadership Development Program
- The City of Fresno was 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

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. USGBC-CC will offer six bicycle education workshops, host in-person biking events, and engage students in a bike to school project in the upcoming year. The Bike Safe Fresno program offered one 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 2021.

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

Project Details

Launch date

September 2019

Anticipated completion date

March 2024

TCC grant funds

$1,029,623

Leveraged funds

$0

Responses to COVID-19

- The City of Fresno has used online and virtual activities during COVID-19 and will continue to do so throughout the pandemic. All quarterly Outreach and Oversight community meetings will be conducted virtually (via Zoom) and posted on social media and CMAC TV.
- The City of Fresno will model outreach events after strategies 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.
- The USGBC-CC developed a website and moved the Bike Safe Fresno program online. The organization will hold virtual bicycle education classes for the community and local students.
- The USGBC-CC will put some community events (e.g., bike to school days) on hold until schools in Fresno are safely reopened.

STORIES FROM THE COMMUNITY

Residents come together in participatory budgeting process

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: The 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 environmental, economic, and social 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 consistency and active involvement of residents attending the early TCC meetings. "One of the ripple effects [of the community engagement process thus far] is that it helped spark more civic engagement throughout the Transform Fresno 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

STORIES FROM THE COMMUNITY

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 startup 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.

Since Gustafson is interested in Downtown revitalization efforts, the potential of the TCC investment funds sparked her curiosity and motivated her to attend the first TCC community meeting. Once there, she quickly realized that the types of 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 being able to create 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 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

Displacement Avoidance Plan

Members of the Anti-Displacement Task Force meet on October 7, 2019. Photo credit: Community Media Access Collaborative

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

Key Accomplishments*

- ADTF established in November 2018, with 11 members appointed by the Mayor
- 4 ADTF meetings held between April 2019 and June 2020
- 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

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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The City of Fresno has led the development of the DAP through a community process that informs the design of the plan and that includes strategies to reduce economic displacement risk within the project area. The city will leverage relationships between the Anti Displacement Task Force (ADTF), O&O Committee, Thrivance Group, and other stakeholders to inform future preventative measures and policy development. The ADTF has 11 appointed members representing residential tenant organizations, commercial tenant organizations, developers and advocacy agencies, and will work to analyze data and recommend solutions related to all causes and areas of displacement. The O&O Committee will provide direction for policy development. Thrivance Group was hired in April 2020 as the DAP consultant and will be responsible for carrying out various tasks in the plan's scope of work. Residents and business owners will provide feedback and information regarding displacement concerns, and project partners will report project-specific data to Thrivance Group. Additional partner agencies include Wells Fargo, the Central Valley Business Diversity Partnership, and the Fresno Regional Workforce Development Board.

Currently, there is limited data that focuses on displacement within the Transform Fresno project area. One of the strategies of the DAP is to gather the data needed to establish more concrete policies. In this regard, the DAP is meant to be a living document, where additional displacement avoidance policies and protections can materialize over the TCC grant period. The DAP also proposes several educational and outreach strategies to be carried out with various partners to further the goal of protecting existing residents and businesses from displacement in the Transform Fresno project area.

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

To preserve the supply of affordable housing, Thrivance Group will gather and analyze data on how rent levels are changing within and outside the project area, conduct educational and informational community workshops, provide a report on overall displacement vulnerability, and make recommendations for rent control ordinances and rent review board policies. While there is currently no rent control ordinance or citywide review board in Fresno, the city will continue to operate a rent stabilization program specific to mobile home parks.

To protect the tenure of existing residents, Thrivance Group will gather and analyze data on evictions and eviction issues within Transform Fresno project area, conduct educational and informational community workshops, provide a report on overall displacement vulnerability, and make recommendations for developing "just cause" eviction policies.

Key Accomplishments

(Continued)

- 23 community members completed surveys evaluating the Draft DAP Framework in May and June of 2019;
- Draft DAP Framework released in May 2019, and final DAP presented to 64 community members in September 2019;
- Subgrant agreement between Thrivance Group and the City of Fresno executed in April 2020 for DAP consultant services;
- Thrivance Group conducted a social climate analysis and started executive stakeholder interviews in June 2020;
- 1 business development workshop held in June 2020;
- The City of Fresno received a technical assistance grant of $133,333 from SGC to fund citywide displacement avoidance activities.

With respect to neighborhood stabilization and wealth building, the City of Fresno will partner with Wells Fargo to conduct Homebuyer and Financial Literacy Education Summits for Transform Fresno 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 and Wells Fargo will inform the community through various engagement activities regarding these workshops. 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 for 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 facilitate the creation of a small-business alliance, business development and retention programs, and financial assistance to local and minority-owned institutions. The alliance of small businesses will be established through the Chinatown Property Based Improvement District (PBID). The city will hire a Chinatown PBID consultant (separate from the DAP consultant) to conduct a feasibility

study for the creation of the PBID and hold community outreach meetings to provide information about the potential district.

The city will work with the Central Valley Business Diversity Partnership to establish a business development and retention program. The program will provide one-on-one, culturally relevant coaching sessions and technical assistance to 10 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, Thrivance Group will gather and analyze data specific to rental subsidies for local, minority-owned businesses in the Transform Fresno project area, provide a complete data and research report, and conduct educational and informational community workshops on the availability of rental subsidies for small businesses.

Project Details

Launch date

September 2019

Anticipated completion date

March 2024

TCC grant funds

$0

Leveraged funds

$60,500

Responses to COVID-19

- Thrivance Group will conduct all outreach, engagement, interviews, and policy analysis either virtually or by phone.
- Starting in June 2020, the ADTF will hold virtual meetings (via Zoom), which will be recorded and then shared on social media and CMAC TV.
- Community outreach and engagement events to celebrate project implementation milestones will be conducted virtually until it is safe to gather in larger crowds.

STORIES FROM THE COMMUNITY

Women shape displacement avoidance efforts

"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 Playground

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."

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."

STORIES FROM THE COMMUNITY

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."

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."

Thrivance Group will recommend a set of implementable anti-displacement policies to the Fresno City Council that reflect community needs and contribute to healing past institutional harms.

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) will fund the creation of a two unique training programs for Transform Fresno residents: West Fresno Advanced Transportation Technology Training (WFATT) and 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.

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

Key Accomplishments*

- Subgrant agreement between the West Fresno Advanced Transportation Technology Training and the City of Fresno executed in June 2020
- Subgrant agreement between the VOICE Gladiator Welding Pre-Apprenticeship Training Program and the City of Fresno in development (pending SGC approval)
- Subgrant agreement for the City of Fresno's WDP Administration (comprehensive workforce data tracking tool) in development

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

After completing the training, WFATT will refer participants to employers that operate zero- and low-emission truck fleets in Fresno County. WFATT will assist all trainees who have successfully completed the training and obtained a Class A driver's license 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 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 preparation to 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 residents who qualify. 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 WDP will be implemented by a variety of project partners, particularly those listed above. 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.

Voice of Including Community Equitably (VOICE) Gladiators will lead the Welding Pre-Apprenticeship Training Program. VOICE Gladiator 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. VOICE is partnering with the State Center Community College District (SCCCD) to utilize classroom space, equipment, and hands-on training facilities for trainees.

Project Details

Launch date

June 2020

Anticipated completion date

March 2024

TCC grant funds

$3,209,932

Leveraged funds

$0

Other workforce development, job training, and employment opportunities will be created through Transform Fresno projects and activities. These 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, and;**
- **Workforce training, technical certificates and degree programs, and employment opportunities, which will be offered at the new West Fresno Satellite Campus.**

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 is expected to be operational in July 2021.

Key Accomplishments*

- **Subgrant agreement with the City of Fresno in development and pending approval;**
- **Subcontractor agreement between Self-Help Enterprises and the City of Fresno Department of Public Works for construction and maintenance services in development.**

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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.

Project Details

Launch date
April 2021

Anticipated completion date
July 2021

Project lifetime (post-implementation)
20 years

TCC grant funds
$343,000

Leveraged funds
$150,000

Estimated Benefits Over Project Lifetime

GHG emissions reductions
41 $MTCO_2e$

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

Response 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 March 2022.

In addition to the investment in affordable housing stock, this project will offer 56 free transit passes per year for residents (one for each

Key Accomplishments*

- The project property was 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
- 40 people provided input on the project implementation

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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

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.

Project Details

Launch date
September 2020

Anticipated completion date
March 2022

Project lifetime (post-implementation)
30 years

TCC grant funds
$11,785,221

Leveraged funds
$18,994,761

Estimated Benefits Over Project Lifetime

GHG emissions reductions
5,345 $MTCO_2e$

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 FTEs

Induced jobs from TCC dollars
4 FTEs

Responses to COVID-19

» The project will continue to move forward and begin construction, following COVID-19 safety protocols.

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. warehouse building. The building will be renovated and repaired to accommodate a commercial kitchen, dry and cold storage facilities, an operations office, and a central food donation and distribution space. 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.

Key Accomplishments*

» **Subgrant agreement with the City of Fresno in development and pending approval**

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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 project is expected to be operational in March 2022. 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.

Project Details

Launch date
March 2021

Anticipated completion date
March 2022

Project lifetime (post-implementation)
10 years

TCC grant funds
$1,488,280

Leveraged funds
$0

Estimated Benefits Over Project Lifetime

GHG emissions reductions
9 $MTCO_2e$

Material diverted from landfill
31 tons

Direct jobs from TCC dollars
16 FTEs

Indirect jobs from TCC dollars
4 FTEs

Induced jobs from TCC dollars
7FTEs

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 Southwest Fresno 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 be-low-market rates for low-income members. The car share net-work 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.

Key Accomplishments*

- Subgrant agreement with the City of Fresno executed in November 2019
- Marketing and community outreach began in November 2019 and will continue throughout the remainder of project implementation
- FMBCF successfully negotiated seven subcontractor agreements with consultants and vehicle operators in March 2020

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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. A community engagement consultant and vanpool operator will support the project in future years.

Project Details

Launch date
September 2020

Anticipate completion date
April 2024

Project lifetime (post-implementation)
3 years

TCC grant funds
$7,717,014

Leveraged funds
$2,292,900

Estimated Benefits Over Project Lifetime

GHG emissions reductions
1,446 $MTCO_2e$

Direct jobs from TCC dollars
37 FTEs

Indirect jobs from TCC dollars
15 FTEs

Induced jobs from TCC dollars
23 FTEs

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 91 kW of solar on five Fresno Housing Authority multifamily buildings in the project area, and 183 kW of solar on 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.

Key Accomplishments*

EOC Partnership for Energy Savings and GHG Reductions in SW Fresno

- Subgrant agreement with the City of Fresno executed in May 2019
- 2 LCC Managers trained in energy efficiency measures and OSHA 30 safety training (PG&E training facility)
- 2 LCC Crew Supervisors trained in solar PV maintenance (SunPower training facility)
- 22 staff trained in energy efficiency measures and solar PV maintenance
- 9 community events and outreach events held
- 7 people provided input on project implementation
- 45 unique site visits conducted
- 45 households approved for energy efficiency measures and 9 homes approved for solar PV
- 6 solar PV systems installed (28.13 kW)
- 22 households received energy efficiency measures

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

Continues on next page.

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 510 kW of solar photovoltaic systems on 135 single-family homes throughout the TCC project area.

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.

Key Accomplishments

(Continued)

GRID Solar Collaborative Single-Family and Multi-Family Partnerships

- Subgrant agreement with the City of Fresno executed in April 2019
- 38 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)
- 64 people directly served by the single-family project and 68 people served by the multifamily project
- 125 single-family and 4 multifamily site visits conducted
- 16 single-family solar PV systems (72.00 kW) and 1 multifamily system (20.74 kW) installed
- 8 volunteers participated in project implementation

Table 3: Transform Fresno Solar and Energy Efficiency Projects

Project Name	Project Lead	TCC Project Area Location(s)	TCC Grant Funds	Non-TCC Grant Funds	Installed Capacity (kW)
EOC Partnership for Energy Savings and GHG Reductions in SW Fresno	Fresno EOC	170 Single-Family Homes	$3.2 million	$0	510
GRID Solar Collaborative Single-Family Partnership	GRID Alternatives	60 Single-Family Home	$883,826	$535,808	183
GRID Solar Collaborative Multi-Family Partnership	GRID Alternatives	5 Fresno Housing Authority Multi-Family Units	$352,549	$110,000	91

Project Details

Launch date
April 2019

TCC grant funds
$4,444,754

Anticipate completion date
July 2023

Leveraged funds
$645,808

Project lifetime (post-implementation)
30 years

Estimated Benefits Over Project Lifetime

GHG emissions reductions
11,139 $MTCO_2e$

Direct jobs from TCC dollars
24 FTEs

Renewable energy generation
36,091,175 kWh

Indirect jobs from TCC dollars
10 FTEs

Energy cost savings
$4,821,781

Induced jobs from TCC dollars
16 FTEs

Responses to COVID-19

- GRID Alternatives incorporated a COVID-19 Safety Task Force for the organization and closed non-essential business offices.
- GRID Alternatives modified their methods of community and client outreach, including drop-off and electronic solar PV applications, virtual and phone appointments, and no-contact site visits and installs.
- Fresno EOC and GRID Alternatives both followed mandated state and local COVID-19 prevention protocols and observed lock-downs. The organizations have incorporated social distancing policies for installation crews and put protocols in place to minimize client contact during site visits and installations.
- The expected completion date for the rooftop solar and energy efficiency projects has been pushed back do to delays incurred by the pandemic.

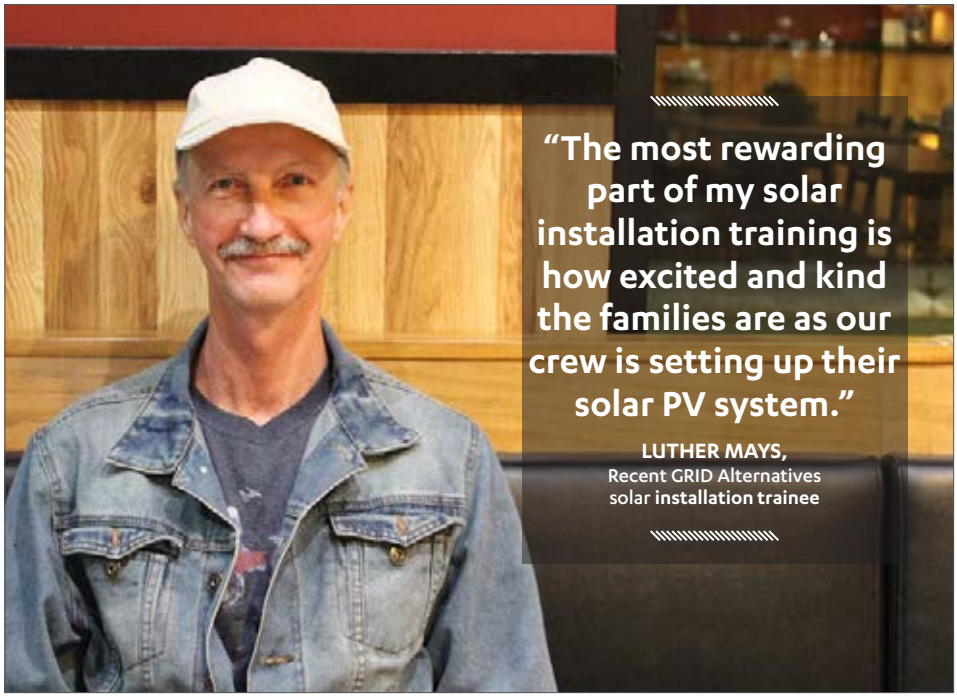
STORIES FROM THE COMMUNITY

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

Training a clean energy workforce in Fresno

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



STORIES FROM THE COMMUNITY

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.

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

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. 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.

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

"[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."

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.

Urban and Community Forestry Projects

Kids from the community learning about the new garden boxes at the Inside Out Community Garden kick-off event on October 7, 2019. Photo credit: City of Fresno

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 (see Table 4 for a list of UCF projects). 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.

Key Accomplishments*

Yosemite Village Permaculture Community Garden & Urban Farm Incubator

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

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

Continues on next page.

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 nonmechanical, no-till, no-spray methods, landscaped bioswales, rainwater capture features, and on-site composting. Similarly, the Inside Out Community Garden will use organic soil, nongenetically 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 will partner with Tree Fresno and other nonprofits to educate volunteers on proper tree planting techniques throughout the Southwest Urban Forest Expansion. Fresno Metro Ministry plans 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, multigenerational, and multilingual outreach to residents and community members, encouraging engagement in the community garden and orchard project programming. The project partners will hold volunteer planting days, nutrition, and cooking classes, and establish 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 will also leverage 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 will establish a resident-based Garden Leadership Committee that will manage the garden's operations and maintenance in conjunction with Fresno Metro Ministry.

Key Accomplishments

*(Continued)**

Inside Out Community Garden

- 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

Southwest Urban Forest Expansion and the Yosemite Village Community Orchard

- Implementation pending

Responses to COVID-19

- The inside Out Community Garden has been closed to the public due to COVID-19. All cooking demonstrations have been conducted virtually. The project held Food Giveaways in May and June of 2020.
- 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.

Table 4: Transform Fresno Urban and Community Forestry Projects

Project Name	Project Lead	Location(s)	TCC Grant Funds	Leverage Funds	Trees
Southwest Urban Forest Expansion	City of Fresno	Jensen Median (41st St to S M.L.K. Jr. Blvd); Elm Median (Ventura St to Jensen St); Fruit Ave and E Jensen St Buffer; Tupman Park and Chandler Park	$212,199	$0	295
Inside Out Community Garden	Fresno EOC	Sunset Community Center	$98,000	$0	4
Yosemite Village Permaculture Community Garden & Urban Farm Incubator	Fresno Metro Ministry	Yosemite Village housing complex	$367,500	$434,153	90
Yosemite Village Community Orchard	Fresno Metro Ministry	Yosemite Village housing complex	$262,500	$0	120

Project Details

Launch date
October 2019

Anticipated completion date
March 2023

Project lifetime (post-implementation)
40 years

TCC grant funds
$940,199

Leveraged funds
$434,153

Estimated Benefits Over Project Lifetime

GHG emissions reductions
799 $MTCO_2e$

Trees planted
509

Avoided stormwater runoff
2,172,415 gallons

Direct jobs from TCC dollars
11 FTEs

Indirect jobs from TCC dollars
4 FTEs

Induced jobs from TCC dollars
4 FTEs

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 Table 5 for a complete list of projects). 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.

Key Accomplishments*

Chinatown Urban Greening

- 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

Mariposa Plaza

- 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

SW Fresno Trail; Park at MLK Magnet Core; St. Rest + Food to Share Hub; Fresno City College

- Implementation pending

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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.

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, bioswales, 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.

Table 5: Transform Fresno Urban Greening Projects

Project Name	Project Lead	Location(s)	TCC Grant Funds	Leverage Funds	Trees (#)
Southwest Fresno Trail	City of Fresno	Fanning Ditch (S West Ave to S Thorne St)	$2.0 million	$0	102
Chinatown Urban Greening	City of Fresno	F St (Mariposa St to Ventura St); Kern St (G St to E St); Mariposa St (E St to G St); China Alley (Tulare St to Kern St and Inyo St to Ventura St)	$7.0 million	$0	248
Mariposa Plaza	City of Fresno	Mariposa St (Congo Alley to Fulton St)	$3.9 million	$0	8
Park at MLK Magnet Core	City of Fresno	West of S M.L.K. Jr. Blvd (E Church St to E Jensen Ave)	$5.4 million	$1.5 million	100
St. Rest + Food to Share Hub	Fresno Metro Ministry	Saint Rest Baptist Church (E Reverend Chester Riggins Ave and S Elm Ave)	$62,220	$70,500	41
Fresno City College: West Fresno Satellite Campus	State Center Community College District	E Church Ave (S Walnut Ave to M.L.K. Jr. Blvd)	$16.5 million	$70 million	450

Project Details

Launch date
July 2019

Anticipated completion date
March 2024

Project lifetime (post-implementation)
40 years

TCC grant funds
$34,839,088

Leveraged funds
$71,570,500

Estimated Benefits Over Project Lifetime

GHG emissions reductions
2,043 $MTCO_2e$

VMT reduction
550,690 miles

Trees planted
949

Avoided stormwater runoff
2,976,767 gallons

Energy cost savings
$4,632

Travel costs savings
$303,977

Avoided stormwater runoff
2,976,767 gallons

Direct jobs from TCC dollars
215 FTEs

Indirect jobs from TCC dollars
58 FTEs

Induced jobs from TCC dollars
151 FTEs

Responses to COVID-19

» The Chinatown Urban Greening project will conduct all community outreach through virtual meetings and social media.

PROFILES:

LEVERAGED PROJECTS

Historic Chinatown's F Street, where several TCC and leveraged-only projects will come to fruition. **Photo credit: Rick Ele**

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: (1) Chinatown Property Based Improvement District, (2) Fresno EOC's Partnership for Energy Savings and GHG Reductions in SW Fresno: EFMP Plus-Up Vehicle Replacement and Incentives, (3) Southwest Offsite Improvements, and (4) 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 will serve 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. In the feasibility study, the City of Fresno will hire a consultant to identify property owners in the potential district. Efforts by the consultant will 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. The second phase, formation of the PBID, will build on the groundwork laid in the feasibility

Key Accomplishments*

- Subgrant agreement with the City of Fresno executed on January 28, 2018
- Kickoff meeting held in the 2019-2020 reporting period with 11 attendees

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

study. 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.

Project Details

Launch date

July 2019

Anticipated completion date

March 2021

TCC grant funds

$0

Leveraged funds

$75,000

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.

Key Accomplishments*

- Subgrant agreement with the City of Fresno executed in May 2019
- 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 total qualified electric vehicle replacements
- 6 people provided commentary or input on project implementation

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

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. The project is expected to be operational in 2020.

Project Details

Launch date

July 2019

Anticipated completion date

December 2021

TCC grant funds

$0

Leveraged funds

$530,000

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.

Key Accomplishments*

» **Subgrant agreement with the City of Fresno executed in January 2018**

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

Project Details

Launch date

January 2018

Anticipated completion date

March 2023

TCC grant funds

$0

Leveraged funds

$15,732,648

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 is expected to be operational in 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.

Key Accomplishments*

- Subgrant agreement with the City of Fresno executed on January 29, 2018
- Increased transit frequency service is expected to launch in January, 2021
- Procurement underway for the purchase of two 40-foot electric buses
- Procurement underway for the electric bus charging station

*From award date (January 2018) through the end of FY 2019-'20 (June 2020)

Project Details

Launch date

January 2021

Anticipated completion date

July 2021

TCC grant funds

$0

Leveraged funds

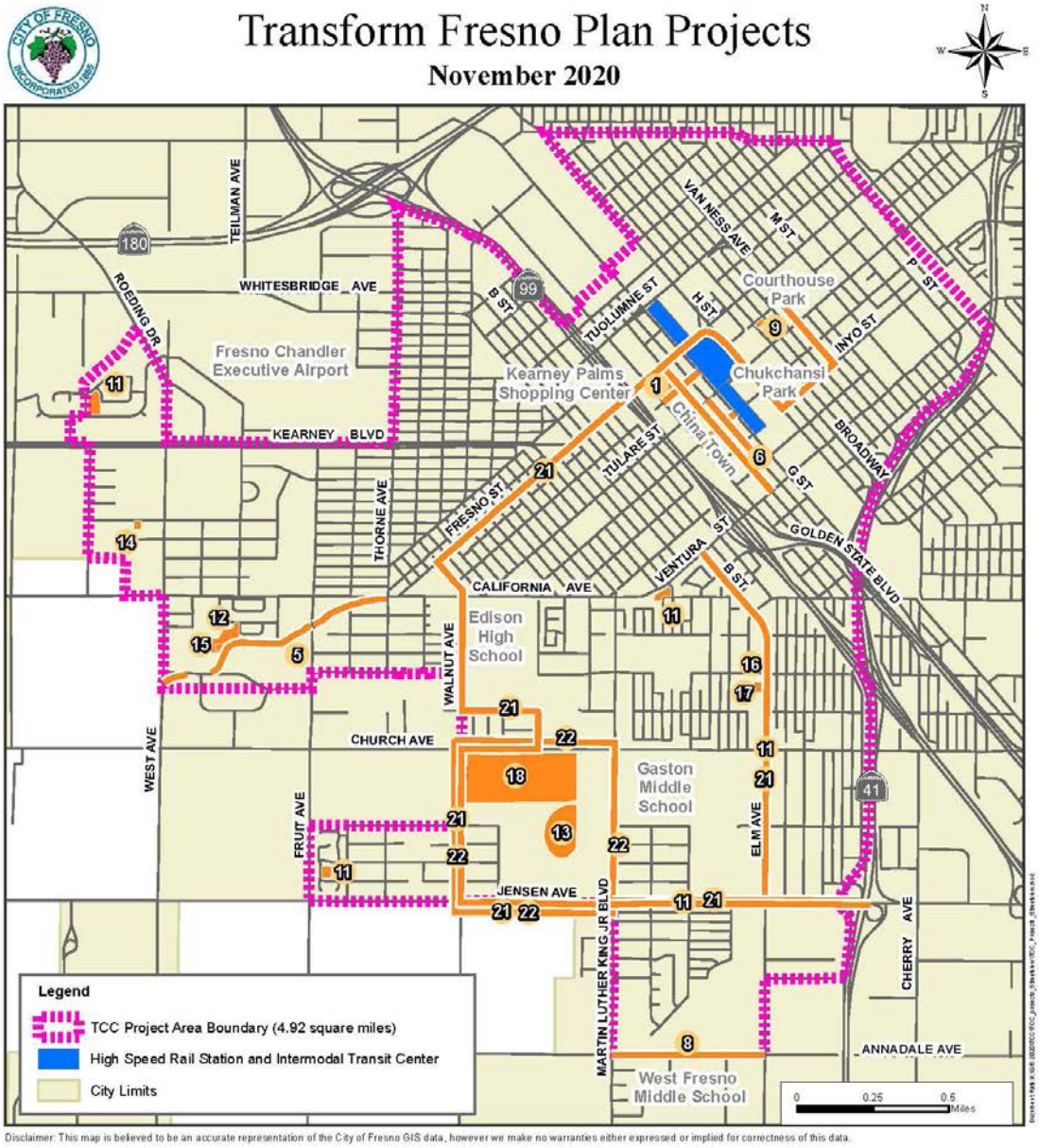
$3,532,774

Responses to COVID-19

- The increased transit service frequency is not expected to launch until January 2021 due to delays from COVID-19.
- The procurement of the two electric buses and the charging station has been delayed until late 2021.

APPENDICES

Appendix 1: Supplemental Maps

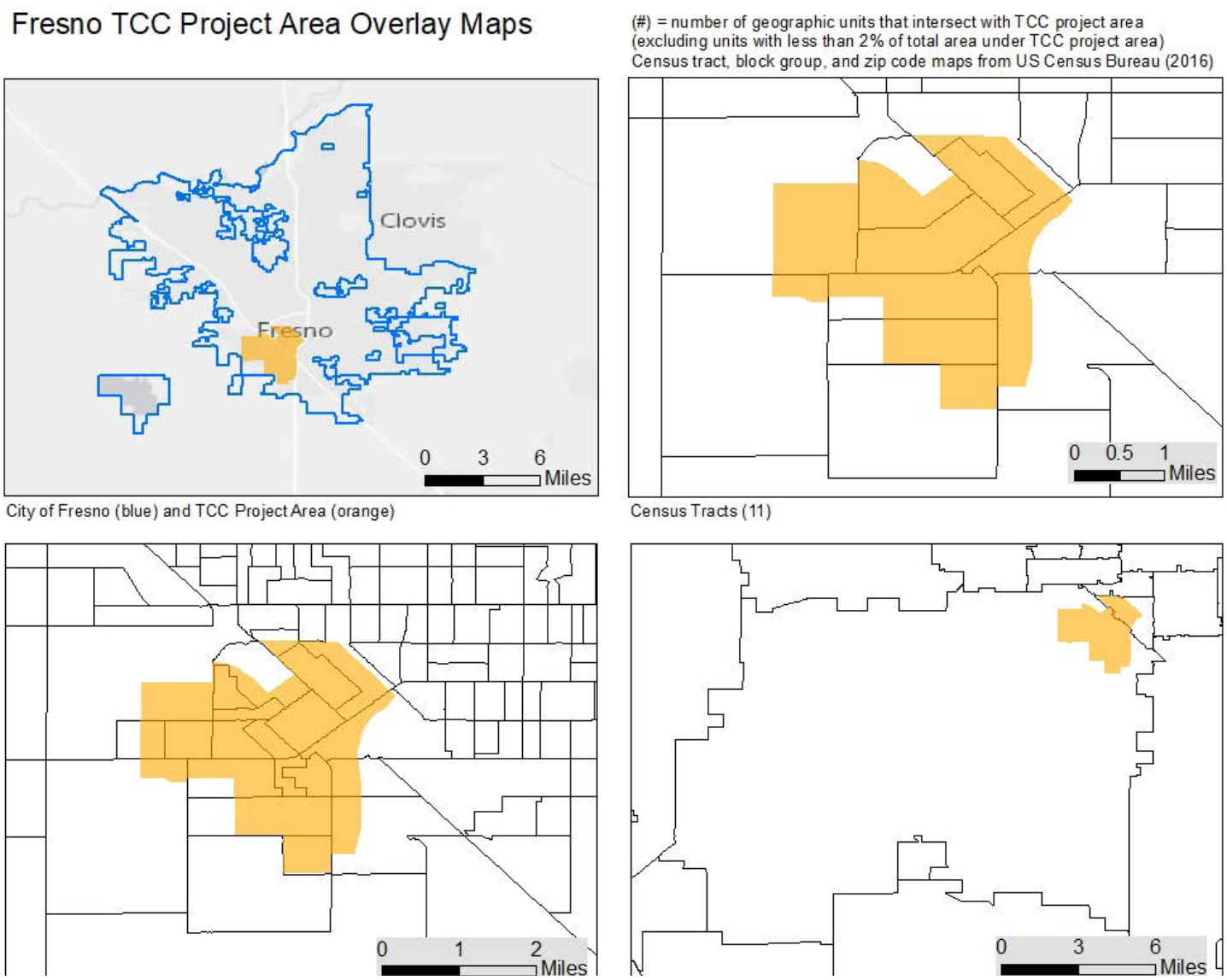


01 - Chinatown Housing Project
05 - Southwest Fresno Trail
06 - Chinatown Urban Greening- Pedestrian Pathways, Lighting and Tree Planting
08 - Annadale Mode Shift
09 - Mariposa Plaza
11 - Southwest Urban Forest Expansion-Tree Planting
12 - Yosemite Village Permaculture Community Garden and Urban Farm
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.)
14000US06019000700	Fresno / Unincorporated	3,758	3.20	1,175
14000US06019001100	Fresno	2,728	1.45	1,883
14000US06019001000	Fresno / Unincorporated	3,955	1.89	2,093
14000US06019000901	Fresno / Unincorporated	2,979	0.75	3,947
14000US06019000200	Fresno	3,147	0.77	4,100
14000US06019000300	Fresno	3,270	0.73	4,487
14000US06019000400	Fresno	6,016	1.31	4,578
14000US06019000600	Fresno	5,351	0.95	5,624
14000US06019000902	Fresno	5,082	0.76	6,680
14000US06019000100	Fresno	3,036	0.33	9,323

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
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%
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%
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%

*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
DEMOGRAPHIC-RELATED INDICATORS (CONTINUED)									
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%
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%
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%
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%
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%

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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
DEMOGRAPHIC-RELATED INDICATORS (CONTINUED)									
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%
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%
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%
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%
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%

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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
DEMOGRAPHIC-RELATED INDICATORS (CONTINUED)									
Percent born in Latin America (B05006)	2009-2013	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.2%	0.0%
	2010-2014	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.2%	0.0%
	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	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%

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
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%
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%

*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
ECONOMIC INDICATORS (CONTINUED)									
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%
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%
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%

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%
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%
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%
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%

*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
ENERGY-RELATED INDICATORS (CONTINUED)									
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%

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%
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%
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%

*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	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	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	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
Bicycle Collision at Injury Level 4: Complaint of Pain	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

*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.

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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 1: Fatal	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	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	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
Pedestrian Collision at Injury Level 4: Complaint of Pain	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

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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 Collision at Injury Level 1: Fatal	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	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	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 4: Complaint of Pain	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%
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%
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%
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%

*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
HOUSING-RELATED INDICATORS (CONTINUED)									
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%
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%
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%
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%
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%

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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
HOUSING-RELATED INDICATORS (CONTINUED)									
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%
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%
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%
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%

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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
HOUSING-RELATED INDICATORS (CONTINUED)									
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%
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%

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	37.8%	3.1%	43.5%	3.0%	34.6%	0.6%	32.3%	0.1%
	2010-2014	36.3%	3.0%	43.7%	3.0%	34.3%	0.6%	32.2%	0.1%
	2011-2015	35.1%	2.9%	45.2%	2.9%	34.3%	0.6%	32.1%	0.1%
	2012-2016	37.2%	3.0%	44.1%	3.1%	33.8%	0.6%	31.7%	0.1%
	2013-2017	38.2%	3.1%	42.1%	3.2%	33.3%	0.5%	31.2%	0.1%
	2014-2018	37.6%	3.1%	41.5%	3.0%	32.9%	0.6%	30.8%	0.1%
	2015-2019	39.2%	3.4%	42.7%	3.0%	32.9%	0.7%	30.4%	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%
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%
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%

*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
TRANSPORTATION-RELATED INDICATORS (CONTINUED)									
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%
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%
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%

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)	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)	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)	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	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	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	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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