Community and Labor Center
at the University of California Merced

Policy Brief
January 2021

Filling the Good Jobs Gap: Fresno's Opportunity for a Citywide Project Labor Agreement

EXECUTIVE SUMMARY

A Project Labor Agreement (PLA) guaranteeing wage levels, training standards, local hires, and other working conditions for municipal public construction projects is currently under local government consideration in Fresno, California. This study finds that from January 2013 to October 2020, an estimated 1,720 construction jobs in Fresno would have been covered through such a municipal policy.

Prior University of California studies and further independent research, reviewed here, demonstrate the significant benefits of PLAs for a diverse and locally inclusive workforce, income, and career training with no significant change in construction costs. In the face of enduring poverty and a gap of mid- and high-income careers in Fresno, a municipal PLA represents an opportunity that would support new or solidify existing careers for 215 construction workers a year on average, with immediate socioeconomic benefits for their families and communities.

In just two decades, Fresno's policy transformation–from an early prohibition on PLAs, to growing PLA adoption with broad official support–offers an instructive case for cities and government bodies that have yet to adopt this foundational labor policy. To support such policy dissemination, this study provides an analysis of the potential construction job impacts of public PLAs.

BACKGROUND

For over sixty years, PLAs have been a cornerstone of worker advocacy efforts for equitable economic development in the construction industry. A PLA is a pre-hire contract negotiated between management and one or more labor unions, which standardizes job terms for a project, including wages, benefits, and working conditions. In turn, a PLA assures a steady labor force and prohibits strikes or lockouts. PLAs may also require quotas for local hires, apprenticeships, and small business participation. In California, over one hundred cities and other public bodies have approved PLAs to date, including over a dozen blanket PLAs covering all public construction work in a jurisdiction (Coalition for Fair Employment Construction 2020).

In recent decades, non-union contractors have sought to challenge the legality of PLAs in public sector construction projects. These opponents claim that PLAs reduce economic competition and raise costs, by mandating union wages that constrain the number of

bids on a project, and ultimately placing their businesses at a disadvantage. In 1993, the Supreme Court unanimously ruled against Associated Builders and Contractors of Massachusetts/Rhode Island, deciding that the National Labor Relations Act does not prohibit public entities from entering into PLAs any more than private entities (U.S. Supreme Court 1993). Associated Builders and Contractors, the largest organization of non-union contractors, responded with a national campaign against PLAs. This led to the first state-level preemptive laws striking down local PLA mandates in Utah and Montana. Following in the footsteps of right-to-work laws across the country, preemptive bans against public PLAs are now established in 24 states (Associated Builders and Contractors 2020).

Independent academic research, however, has found a lack of empirical evidence for claims made by PLA opponents. Prior University of California research on construction bids for projects among California Community Colleges between 2007 and 2016–controlled for project size and location, as well as business cycle and season–found PLA policies did not affect the number of bids (Philips and Waitzman 2017). The study also found that the lowest bids on projects with PLA agreements were no higher in cost than those without PLA agreements, and had fewer problems and delays during construction. Similarly, an analysis of PLAs on school construction costs in Massachusetts found that higher PLA costs were attributed to factors that underlie PLAs, such as the size of the project (Belman et al. 2010).

The City of Fresno is a unique and instructive case of a transformation of PLA laws. In 2000, Fresno was one of the first jurisdictions in the nation to ban PLAs (Wang 2012). In 2012, the California legislature passed a law preventing state funding to municipal projects in cities with bans on public PLAs. By 2014, Fresno City Council turned around to repeal its prior PLA ban (Calix 2019). Next, in June 2019, Fresno's City Council unanimously approved a PLA for the $115 million expansion of the Fresno Airport (Watkins 2019). Soon after, in February 2020, the Board of Trustees at the Fresno area's State Center Community College District approved a PLA covering an estimated $86.5M in construction on a new West Fresno campus, including all subcontracts of $600,000 or above (SCCD 2020).

These breakthrough policies followed a decade in which PLAs became a standard practice on private sector utility-scale solar construction in the surrounding San Joaquin Valley (Philips 2014), and on the estimated $12.6B first segment of California's High-Speed Rail from Fresno to Kern County (California High Speed Rail Authority 2019).

As California's fifth largest city, with an estimated population of 531,576, Fresno is characterized as both a major regional economic hub and a stronghold of inequality. According to US Census Bureau American Community Survey 2014-2018 data, Fresno's median household income ($50,432) is far below the state average of ($71,228), and the rate of household poverty (25.2%) was more than double the state average (11.8%) (US Census Bureau 2018).

To the extent which PLAs support higher-paying, career-track jobs, Fresno municipal public construction remains untapped potential. On January 7, 2021, the Fresno City Council showed strong interest in this potential, as it approved (by a vote of 6-1) a process to design a PLA policy proposal that would cover municipal public construction citywide.

DATA AND METHODS

This study utilizes public records from the California Department of Industrial Relations Public Works Registration Database (PWC-100) (CDIR 2020). The analysis examines all 145 qualifying construction contracts issued by the City of Fresno, and all 6 qualifying contracts from the Fresno Housing Authority, with listed construction start dates between January 1st, 2013 and October 31st, 2020.

The analysis was limited to projects that would have been affected by a hypothetical municipal Project Labor Agreement. As a result, contracts were included in this study only if they were issued by the City of Fresno or the Fresno Housing Authority, and met one or more of the following three conditions (all figures in adjusted 2020 dollars):

i. Contracts over $1M: Contract amount listed at $1,000,000 or greater.

ii. Bond-funded contracts: Contract amount over $500,000, with funding from a municipal bond of at least $1,000,000, in adjusted 2020 dollars. Bond data was obtained from the City of Fresno's most recently available Complete Bond Listing (City of Fresno 2018).

iii. Multi-prime contracts: Contract amount over $500,000, on a project site with multiple contracts totaling of $1M or greater, in adjusted 2020 dollars. This accounted for only a small number of contracts identified in the PWC-100 database.

These conditions were designed to follow the parameters of a hypothetical Project Labor Agreement for the City of Fresno and Fresno Housing Authority, with one minor exception. The $500,000 and above condition for considering bond-funded and multi-prime contracts was not indicative of expected Project Labor Agreement terms, but instead a means to expedite data collection and omit small projects with only minor effects on findings. This condition contributes to a more conservative job estimates, as smaller bond-funded and multi-prime projects would likely add modestly to the total job estimates.

Each contract was classified with a single North American Industry Classification Scheme (NAICS) construction sub-sector code, corresponding to the principal type of work listed on the contract (for example, "Highway, street, and bridge construction"). Where the principal type of work was difficult to specify based on listed contract data and publicly available city records, contracts were classified a general NAICS category (for example, "Heavy and civil engineering construction").

Using data from the US Economic Census, this study then estimated the annual full-time equivalent jobs provided on each project. Estimates of construction jobs on each Fresno municipal project were created based on California-specific construction sector data from the 2017 US Economic Census, the most recent year available (US Census Bureau 2020). This Census data provided specific construction sub-sector figures (arranged by NAICS codes) for construction workers on payroll each quarter, and for combined annual sales, shipments, and revenues (equivalent to a sum of construction contract amounts). Construction worker job figures are adjusted in the Census data to reflect annual full-time equivalent (annual FTE) jobs.

For each construction trade and subsector listed, this study used Economic Census data to derive a "job factor" for annual full-time equivalent construction workers per $1,000,000 in revenues. To create this factor, the analysis divided the annual average of

Table 1. Demonstration of California construction sub-sector data and job factor

Industry sub-sector (NAICS classification)	Construction workers in California (annual FTE)	Sales, value of shipments, or revenue in California (in $1,000s)	Job factor (workers per $1M revenue)
Highway, street, and bridge construction	21,160	$10,540,013	2.01
Other heavy and civil engineering construction	4,592	$3,244,196	1.42
Water and sewer line and related construction	14,267	$6,189,516	2.31
Electrical contractors and other wiring installation	81,629	$23,243,498	3.51

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

Table 2: Number of municipal construction contracts per year, by contract type

	2013	2014	2015	2016	2017	2018	2019	2020	Total
Fresno contracts ≥ $1M	16	9	10	21	8	12	11	17	104
Bond & multi-prime Fresno contracts ($500K - $1M)	10	3	5	3	8	2	5	5	41
Fresno Housing Authority contracts	0	0	0	0	1	0	3	2	6
All contract types	26	12	15	24	17	14	19	24	151

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

full-time equivalent construction workers in a specific sub-sector by its total annual revenue. Table 1 demonstrates four inputs and job factor outcomes of this approach.

Tables 2 and 3 list the number of Fresno municipal construction contracts and total contract amount (in millions of dollars) for each year, as documented by the Department of Industrial Relations PWR-100 database.

Specific estimates of jobs on qualified municipal contracts were then calculated with the following formula:

$$J = [(C / i) / 1{,}000{,}000] \times F$$

Where:

J: Estimated construction jobs on a specific City of Fresno project

Table 3: Amount of municipal construction contracts per year, by contract type (in $ mil.)

	2013	2014	2015	2016	2017	2018	2019	2020	Total
Fresno contracts ≥ $1M	7.2	52.3	46.3	186	180	47.7	40.1	47.1	94.8
Bond & multi-prime Fresno contracts ($500K - $1M)	3	6.3	2.1	3.3	2.2	5.2	1.3	4.9	3.7
Fresno Housing Authority contracts	0	0	0	0	0	8	0	14	28
All contract types	10.2	58.6	48.4	189	182	60.9	41.3	66	127

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

Table 4. Estimated municipal construction jobs (annual FTE) by contract type and year

	2013	2014	2015	2016	2017	2018	2019	2020	Total
City of Fresno contracts ≥ $1M	120	113	444	416	102	87	124	177	1,583
Bond & multi-prime Fresno contracts ($500K - $1M)	15	5	9	6	18	3	8	9	74
Fresno Housing Authority contracts	0	0	0	5	0	9	17	31	62
All contract types	135	118	454	427	119	99	150	218	1720

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

C: Contract amount for a specific project, based on PWC-100 data

i: Inflation factor, based on annual CPI, to adjust contract amounts to 2020 dollars (US Bureau of Labor Statistics 2020)

F: Job factor (construction workers per $1M) for the relevant sub-sector, identified from Economic Census data as described above

Specific project job estimates were then combined to create annual, total job estimate figures. Results are available by year and contract category in Table 4, rounded to the nearest integer.

In Table 5, contract amounts, and job estimates are provided by industry sub-sector, based on types from the North American Industry Classification System (NAICS).

Table 5: Contract amounts and estimated municipal construction jobs by sub-sector

	Contract Amounts, 2013-2020 Total ($M)	Jobs, 2013-2020 Total (annual FTE)
Water and sewer line and related structures construction	493	1161
Highway, street, and bridge construction	139.8	280
New multifamily housing construction (except for-sale builders)	50	31
Electrical contractors and other wiring installation contractors	29.1	100
Heavy and civil engineering construction	20.9	44
Nonresidential building construction	20.8	16
Other specialty trade contractors	5.6	18
Other heavy and civil engineering construction	4.3	6
Building finishing contractors	2.4	13
Other building equipment contractors	2.4	7
Power and communication line and related construction	2	5
Oil and gas pipeline and related structures construction	1.2	5
Plumbing, heating, and air-conditioning contractors	0.5	2

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

Table 6: Estimated jobs on PLA-qualified Fresno municipal construction projects

	2013	2014	2015	2016	2017	2018	2019	2020	Total
Municipal construction jobs (annual FTE)	135	118	454	427	119	99	150	218	1,720

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

FINDINGS

From 2013-2020, the distribution of Fresno municipal construction contracts that qualified for a potential PLA were primarily projects over $1M in the water, sewer, and road sub-sectors. More than two-thirds of qualifying contracts were with the City of Fresno in amounts greater than $1M (104 of 151 contracts) (see Table 2). Across the eight years studied, Fresno city contracts above $1M accounted for three-fourths (74.9%) of the total dollar amount of qualifying Fresno construction contracts ($94.8M of $126.5M) (see Table 3). More than nine in ten (91.9%) of the estimated jobs created by PLA-qualified construction contracts in Fresno were generated by City of Fresno contracts in excess of $1M (see Table 4). As shown in Table 5, water and sewer projects made up a strong majority of Fresno municipal construction contract dollars (63.9%) and jobs (68.8%) during this period.

This analysis estimates that 1,720 annual, full-time equivalent construction jobs could have been covered by a Fresno municipal PLA from 2013-2020, as summarized in Table 6. Qualified Fresno municipal construction spending of $126.5M, during eight years, supported an average of 215 full-time equivalent construction jobs each year. This job estimate provides the first published analysis of the specific potential job impact of a municipal PLA in Fresno, through a method that could be replicated for other cities in California and beyond.

POLICY IMPLICATIONS

The estimated 1,720 construction jobs without PLA standards represent missed opportunities for stronger wages, career training, and working conditions in one of California's lowest-income major cities. Research comparing similar union and non-union jobs has shown that union jobs in the San Joaquin Valley provide higher wages of an additional $7,000 per worker annually, on average (Jacobs and Thomason 2018).

With this average wage increase to all construction jobs estimated in this study, a municipal PLA would have benefited Fresno with over $1.5M per year, on average, in total increased income for construction laborers. These income benefits may in fact be greater, as an additional study found that "those workers who earn the least in non-union workplaces gain the most" from union jobs (Thomason and Bernhardt 2018).

Public-sector PLAs frequently include local hire provisions that lead to diverse local inclusion in unionized construction careers (Waheed and Herrera 2014). From these wage and inclusion benefits, University of California studies have found a single union job will "decrease by 30.6 percent the likelihood that a worker is in a family where at least one member is enrolled in a public safety net program" (Jacobs and Thomason 2018), while providing a collective voice for workers that is often lacking otherwise (MacGillvary and Jacobs 2018).

Through support for union-affiliated training programs, PLAs prepare a skilled labor force that has lasting benefits to both public and private-sector growth. In a report on solutions for skilled construction labor shortages, the Business Roundtable Construction Cost Effectiveness Task Force concluded "(t)he union sector has always excelled in craft training through the joint labor/management apprenticeship programs... but the open shop [non-union] sector, as a whole, has not supported formal craft training to the extent necessary" (Business Roundtable 1997).

According to the available independent academic studies, PLAs deliver these benefits without increasing costs to construction projects, while reducing project delays. An independent study commissioned by a California county agency found that PLA projects had "fewer problems" during construction than non-PLA projects, and claimed the PLA "dispute resolution process was an advantage" (Kelley et al. 2013). The only existing comprehensive study of PLAs and bid effects, analyzing 88 PLA and 175 non-PLA community college projects, shows that PLAs did not increase the price or reduce the number of construction bids. In fact, PLA projects in that study received low bids that were 5% cheaper on average than their non-PLA counterparts.

For a city aiming for broad prosperity, a municipal PLA policy would offer rich opportunity. The most recent Fresno General Plan "envisions Fresno as a vibrant, growing city, infused with a sense of heritage and community"(City of Fresno Planning and Development 2014). This study finds that a

municipal PLA for Fresno would benefit over two hundred construction jobs per year on average, along with benefits to construction.

REFERENCES

Associated Builders and Contractors. "Building America: The Merit Shop Scorecard: A Review & Ranking of State Construction Environments." Accessed online on January 9, 2021 at: https://meritshopscorecard.org

Belman, Dale, Russell Ormiston, Richard Kelso, William Schriver, and Kenneth A. Frank. 2010. "Project Labor Agreements' Effect on School Construction Costs in Massachusetts." Industrial Relations: A Journal of Economy and Society 49(1): 44–60. Accessed online on January 9, 2021 at: doi: 10.1111/j.1468-232X.2009.00586.x

Building & Construction Trades Council of the Metropolitan District v. Associated Builders & Contractors of Massachusetts/Rhode Island, Inc. 507 U.S. 218. Accessed online on January 9, 2021 at: https://www.law.cornell.edu/supremecourt/text/507/218

Business Roundtable Construction Cost Effectiveness Task Force. 1997. "Confronting the Skilled Construction Work Force Shortage: Blueprint for the Future"

California Department of Industrial Relations. "Public Works Projects Registration (PWC-100) Public Search Utility." Accessed online on November 3, 2020 at: https://www.dir.ca.gov/pwc100ext/ExternalLookup.aspx?Type=New

California High Speed Rail Authority. 2019. "Delivering High-Speed Rail to Californians: SB 1029 Project Update Report to the California State Legislature." May 2019. Accessed online on January 9, 2021 at: https://hsr.ca.gov/docs/about/legislative_affairs/SB1029_Project_Update_Report_050119.pdf

Calix, Brianna. 2019. "Fresno CA Wants Project Labor Agreement for Airport Expansion." *Fresno Bee*. March 7, 2019. Accessed online on January 9, 2021 at: https://www.fresnobee.com/news/local/article227252379.html

City of Fresno. 2018. "Complete Bond Listing." June 30, 2018. Accessed online on January 9, 2021 at: https://www.fresno.gov/finance/wp-content/uploads/sites/11/2019/03/Complete-Bond-Listing.pdf

City of Fresno Planning and Development. 2018. "Long-Range Plans and the Development Code." Accessed online on January 9, 2021 at: https://www.fresno.gov/darm/general-plan-development-code

Jacobs, Ken, and Sarah Thomason. "The Union Effect in California #1: Wages, Benefits, and Use of Public Safety Net Programs." UC Berkeley Labor Center, May 31, 2018. Accessed online on January 9, 2021 at: https://laborcenter.berkeley.edu/union-effect-in-california-1

Kelley, Mark, Dannis Woliver Kelley, and Bruce Hart. 2013. "Project Stabilization Agreement, New Academic Center." Presented at the College of Marin Board of Trustees Regular Meeting, April 16, 2013. Accessed online on January 9, 2021 at:

completion and skilled workforce training, towards city leaders' goals of vibrant growth.

http://www.marin.edu/WORD-PPT/FINAL_ProjectStabilizationAgreement_NewAcademicCenter.pdf

MacGillvary, Jenifer, and Ken Jacobs. "The Union Effect in California #3: A Voice for Workers in Public Policy." UC Berkeley Labor Center, June 20, 2018. Accessed online on January 9, 2021 at: https://laborcenter.berkeley.edu/union-effect-in-california-3

Philips, Peter. "Environmental and Economic Benefits of Building Solar in California: Quality Careers — Cleaner Lives." *UC Berkeley Labor Center* (blog), November 10, 2014. Accessed online on January 9, 2021 at: https://laborcenter.berkeley.edu/environmental-and-economic-benefits-of-building-solar-in-california-quality-careers-cleaner-lives

Philips, Peter, and Emma Waitzman. 2017. "Project Labor Agreements and Bidding Outcomes: The Case of Community College Construction in California." UC Berkeley Labor Center, January 9, 2017. Accessed online on January 9, 2021 at: https://laborcenter.berkeley.edu/project-labor-agreements-and-bidding-outcomes/

State Center Community College District. 2019. "FCC New West Fresno Career Technical Center." June 28, 2019. Accessed online on January 9, 2021: https://www.scccd.edu/business-and-community/measure-c/project-information/fresno/west-fresno-campus.html

The United States Census Bureau. 2017. "Construction (NAICS Sector 23)." Accessed online on November 1, 2020 at: https://www.census.gov/data/tables/2017/econ/economic-census/naics-sector-23.html

Thomason, Sarah, and Annette Bernhardt. "The Union Effect in California #2: Gains for Women, Workers of Color, and Immigrants." UC Berkeley Labor Center, June 7, 2018. Accessed online on January 9, 2021 at: https://laborcenter.berkeley.edu/union-effect-in-california-2

US Bureau of Labor Statistics. "CPI Inflation Calculator." Accessed online on November 1, 2020 at: https://www.bls.gov/data/inflation_calculator.html

US Census Bureau. 2018. "American Community Survey 5-Year Estimates Data Profiles: Selected Economic Characteristics." Accessed online on November 1, 2020 at: https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2018

Waheed, Saba, and Lucero Herrera. "Exploring Targeted Hire: An Assessment of Best Practices in the Construction Industry." UCLA Labor Center, March 2014. Accessed online on January 9, 2021 at: https://www.labor.ucla.edu/publication/exploring-targeted-hire

Wang, Lan. 2012. "Project Labor Agreements: What You Need To Know." *Western City Magazine*, February 1, 2012. Accessed online on January 9, 2021 at: https://www.westerncity.com/article/project-labor-agreements-what-you-need-know

Watkins, Howard. 2019. "Airport Labor Pact Wins Unanimous Council Support." *GV Wire*, June 26, 2019. Accessed online on January 9, 2021 at: https://gvwire.com/2019/06/26/airport-labor-pact-will-it-help-or-hurt-fresno-workers

Prepared by: Keith Brower Brown, University of California, Berkeley. Direct correspondence to kbbrown@berkeley.edu

About UC Merced Community and Labor Center

The UC Merced Community and Labor Center conducts research, education and policy development on issues of community, labor and employment.