

A Worker & Community Centered Approach to Just Transition in the Oil Refining Sector

Lessons from Contra Costa County, California

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Figure 2. Contra Costa County in the context of the San Francisco Bay Area

Contra Costa County: Northern California's Oil Refining Hub

- 5 of California's major refineries are located in Contra Costa (4) and Solano (1) counties
- Phillips 66 Rodeo and Marathon Martinez converted to renewable fuels production in 2023/2024
- Valero Benicia (Solano County) has begun the process of idling, transitioning to an import facility, laying off 237 of 348 employees
- California's other major oil refining hubs are in Los Angeles County (4), and Kern County (2)



A Wake Up Call: Marathon Martinez Idling in 2020



- The Marathon Martinez refinery in Contra Costa County was “Indefinitely Idled” in 2020, citing reduction in gasoline demand at the start of the COVID pandemic
- **700+** workers laid off, including 350 members of United Steelworkers Local 5
- The facility later transitioned to a renewable fuels refinery, with a fraction of its former permanent workforce

The Contra Costa Refinery Transition Partnership

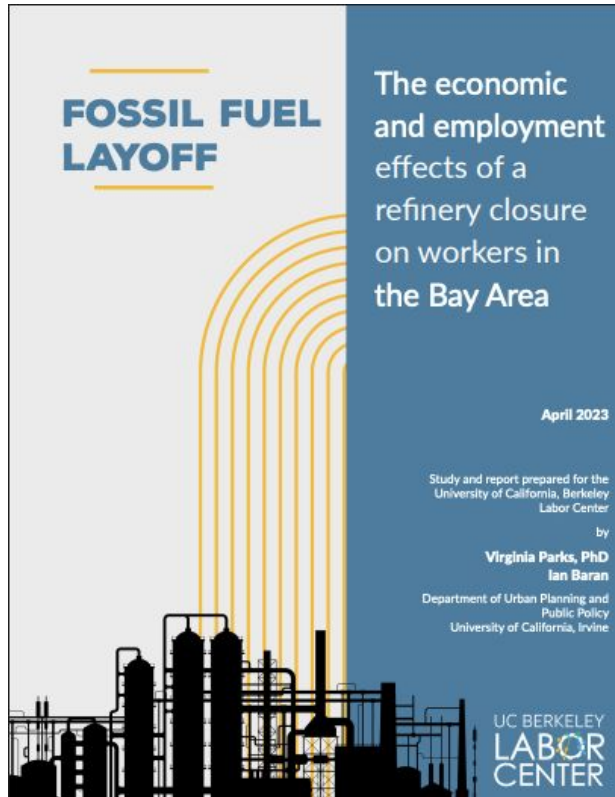
CORE MEMBERS:



ADVISORY MEMBERS:

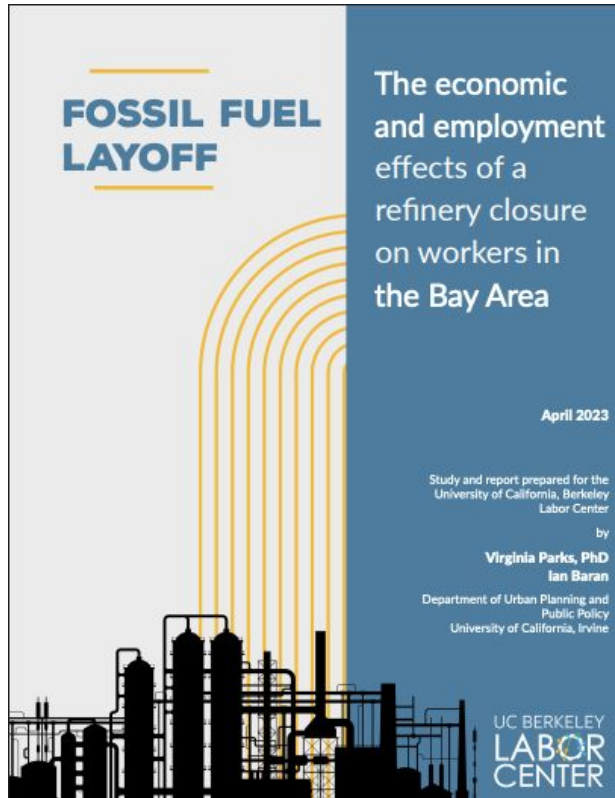


Research: Marathon Martinez Worker Study



- Detailed academic survey and interviews with workers laid off when Marathon Martinez refinery idled in 2020
- One year after the layoff:
 - **26%** of workers were still unemployed
 - **24%** average wage cut for workers who secured new employment
 - **A third** of workers reported serious financial challenges post-layoff
 - The primary industries refinery workers moved into were: utilities, chemical treatment, manufacturing. **Just 28%** of workers stayed in fossil fuels

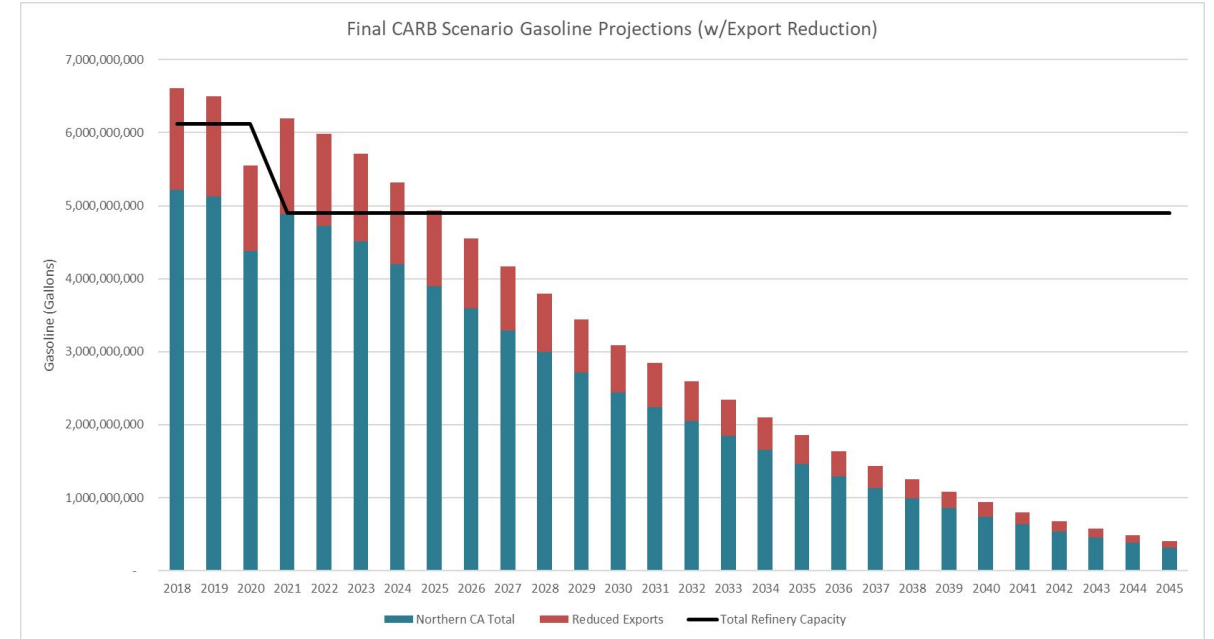
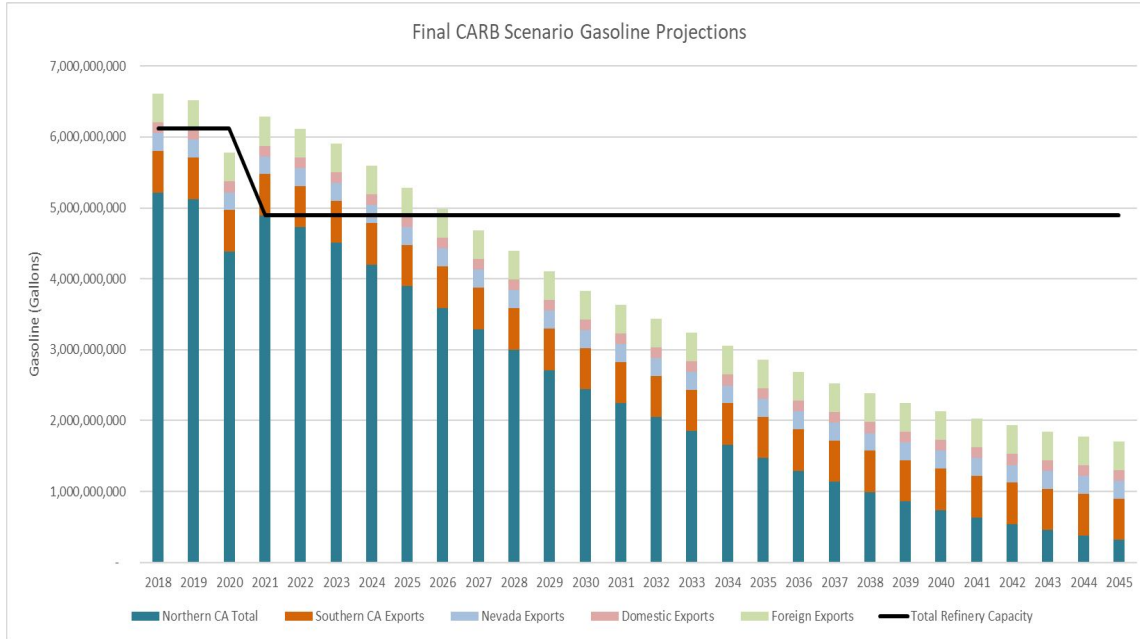
Research: Marathon Martinez Worker Study



Recommendations to support displaced workers

- Extended cash payments to maintain pre-layoff income levels
- Financial support to cover the 24% average gap in workers' pre-layoff wages and their post-layoff wages
- Bridge-to-retirement funding that provides full retirement benefits to workers eligible for early retirement within one year following layoff
- Third-party certifications to define and verify the skills of refinery workers, and facilitate more efficient and accurate skill matching between jobs and workers in the labor market
- Targeted, individualized job search assistance that focuses on a broad scope of strategies for identifying good job opportunities, and preparing for and applying for those jobs
- Targeted, short-term training for a specific set of occupations and industries, with income support for workers during training
- Short-term, stand-alone training modules to enable workers to maintain certifications they had earned on-the-job at the refinery, such as CPR and HAZMAT training certifications
- Counseling services for workers and their families during layoffs and job transitions

Research: Bay Area Refinery Transition Analysis



Key take-away: 65% - 92% reduction in needed Bay Area refining production capacity by 2045, based on CARB 2022 Scoping Plan (Source: Bay Area Refinery Transition Analysis by Christina Simeone and Ian Lange)

Research: Job & Tax Revenue Impacts (Contra Costa County)

- The refinery industry is an important source of well-paying jobs for workers without a college degree. **3,000** direct jobs; **15,000 indirect jobs** (E.g. manufacturing, construction, transportation)
- Top refinery occupations earn upwards of **\$50/hr** plus benefits. Jobs with comparable education requirements outside the refineries typically earn under **\$20/hr** (**\$25/hr** for non-refinery manufacturing jobs)
- The refinery industry annually contributes **\$972M** in cumulative local tax revenue
 - Direct: **\$136M (5% of CCC local tax revenue)**
 - Indirect: **\$836M (31% of CCC local tax revenue)**
- **\$429M** of Special Districts tax revenue

Table 1: Petroleum Refining Industry Estimated Tax Impacts in Contra Costa (2022, in millions)²⁵

Impact	Cities	Special Districts	Contra Costa County	Total Local Impact
Direct <i>Petroleum refining industry</i>	\$33.6	\$60.0	\$42.7	\$136.3
Indirect <i>Petroleum refining input activities</i>	\$206.0	\$368.9	\$261.2	\$836.1
Cumulative Local Impact	\$239.6	\$428.9	\$303.9	\$972.4

Source: IMPLAN 2022, analyzed by UC Berkeley Labor Center

Valero Benicia's closure

- **Direct job losses:** Estimated **400+ job losses**
 - WARN Act issued for 237 workers to be laid off by July 1
- **Indirect job losses:** Estimated **800+ job losses**
- **Tax revenue losses (direct + indirect):** Estimated **\$10-12M** annually to the City of Benicia (~20% of the City's General Fund)

Source: EconSolutions, "Labor Market and Economic Impact From Refinery Closure, consultant report commissioned by the City of Benicia. September 2025.

The image shows a screenshot of two news articles. The top article is from the San Francisco Chronicle, titled "This Bay Area town grew into a prosperous suburb — but is now facing fiscal crisis". It is by Connor Letourneau, Staff Writer, and was updated on June 1, 2025 at 8:37 a.m. The bottom article is from KQED, titled "'Urgent Need': Benicia Braces for Economic Future Without Valero". It is by Kevin Stark, dated Oct 9, 2025, and updated at 3:54 pm PT. Both articles include social media sharing icons.

Research: Clean Up & Remediation Analysis

There's a 'lake' of oil under LA's soon-to-close refinery. Who's going to clean it up?



Questions about cleanup loom as the Phillips 66 refinery in Wilmington prepares to close.
(Mark J. Terrill / Getty Images)

- Lack of current publicly-accessible information on the extent of contamination on Bay Area refinery sites.
- Clean-up costs may incentivize refinery owners to seek to delay or postpone full facility closures. There is significant risk that refinery owners will seek to avoid or minimize clean-up responsibilities.
- Communities, regulators and local government **must prepare ahead** for facility closures and conversions, both to ensure safety and proper clean-up, and to ensure that the community has the opportunity to re-envision the use of valuable refinery lands in the event of a closure.

31 Policy Recommendations & Just Transition Economic Development Framework



Refinery Transition Planning and Oversight - Creating more oversight in the refinery transition process and ensuring worker and community needs are centered

Worker Safety Net & Transition – Building a meaningful safety net and transition support for refinery industry workers who experience layoff

Land Use, Decommissioning & Clean-Up - Ensuring communities aren't left with the cost of cleaning up highly contaminated lands, so lands can be repurposed for new development and community needs

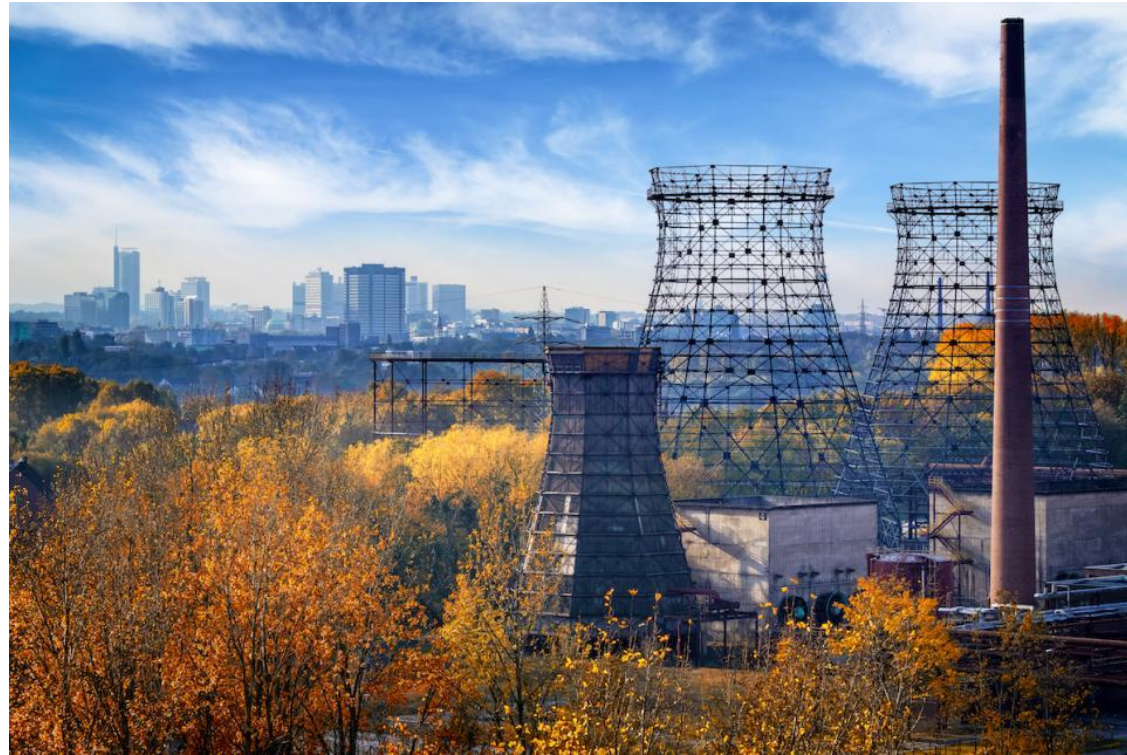
Refinery Community Support & Transition - Supporting frontline refinery communities recover from disproportionate health impacts, loss of tax revenue, and have a voice in future economic development

Just Transition Economic Development - Ensuring Contra Costa takes swift action, and receives state/federal support, for building a diversified high-road economy for the future that can replace the economic benefits of the refining industry, centered around job quality, equity and environmental justice

The Need: A Holistic Energy Transition Strategy for California

- **Plan the Decline: Reduce Impacts & Support Transition in Fossil Fuel-Dependent Communities**
 - Robust safety net & transition program for workers
 - Short term tax stabilization fund support, and longer term economic development support for communities
 - Clean-up requirements for decommissioning facilities and community visioning in redevelopment
 - Effective state coordination with stakeholder oversight (ex: Office of Just Transition / Economic Transition)
- **Plan the Growth: Build CA's Clean Economy in a Way that Maximize the Benefits for All Californians**
 - Statewide economic development strategy, linking climate and economic goals, with targeted incentives for impacted fossil fuel-dependent communities and underserved communities
 - Attach and enforce standards to ensure public investments are creating quality jobs and community benefits

There Are Models for Just Transition



Wage Replacement Funds: Examples from CA and the U.S.

Example #1: The Redwood Employee Protection Plan (REPP)

- Established in 1978, to minimize timber industry workers impacted by the expansion of Redwood National Park in Northern California
- Provided a holistic package of financial support and services, including 5+ years of wage replacement for impacted workers, and rehiring of lumber workers in park restoration activities
- Over 10 years, provided \$110M for 6,000 workers. Average annual pay was \$22,000
- Established by the U.S. Congress, administered by the California Employment Development Department (EDD)

Example #2: The U.S. Trade Adjustment Act (TAA)

Example #3: New Mexico Energy Transition Act (2023)



Tax Stabilization Funds: An Example from New York State

- In 2015 the 100+ year old coal fired power plant **Huntley Generating Station in Tonawanda, NY** (outside Buffalo) closed
- As the plant slowed its operations, between 2008-2012, the community of Tonawanda lost \$6.2M in tax revenue for the town, county and local school district. 140 teachers lost their jobs and three elementary schools and a middle school closed
- The Huntley Alliance, a coalition of environmental, labor and community advocates, organized and **secured passage of an omnibus spending bill that provided \$19 Million “to aid communities facing tax shortfalls as a result of fossil fuel power plants closing.”**
- The amount was later increased to \$30M, again to \$45M, and most recently to \$69M .

Sources: J. Mijin Cha “A Just Transition For All: Workers and Communities for a Carbon-Free Future,” *Grist*



The retired Huntley Generating Station on the banks of the Niagara River. Google Earth

Appendix

Job Match Analysis

- The most common refinery occupations are **not expected to experience regional growth** outside of the refinery industry that will be sufficient to absorb expected job losses.
- Workers in these occupations have **valuable skills that can translate to other occupations** and industries, but growth in these occupations and industries is also expected to be limited.
- Wages for comparable occupations outside of the refinery industry are currently **around half of refinery workers' wages**.

Table 33. Median wages for high-risk refinery occupations and matching occupations expected to grow in Contra Costa County

Top at-risk refinery occupations	Median hourly wage*	Related occupation	Median hourly wage
Petroleum Pump System Operators, Refinery Operators, and Gaugers	\$49.53	Chemical Equipment Operators and Tenders	\$28.71
		Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$24.44
Mixing and Blending Machine Setters, Operators, and Tenders	\$24.16	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$24.44
		Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	—
		Food Batchmakers	\$18.39
Industrial Machinery Mechanics	\$37.77	Maintenance and Repair Workers, General	\$29.24
		Mobile Heavy Equipment Mechanics, Except Engines	\$36.98
		Maintenance Workers, Machinery	\$34.58
		Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$37.09
		Machinists	\$29.38
		Stationary Engineers and Boiler Operators	\$50.36
Chemical Plant and System Operators	\$49.43	Millwrights	\$49.85
		Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$24.44
		Chemical Equipment Operators and Tenders	\$28.71
		Mixing and Blending Machine Setters, Operators, and Tenders	\$24.16

Table 4. Post-layoff employment sector and wages

Sector	Percent of workers	Median hourly wage
Oil and gas	28%	\$37
Utility (e.g., electrical power, natural gas, wastewater, water processing, steam)	19%	\$41
Chemical treatment (e.g., chemical and industrial agriculture)	12%	\$42
Manufacturing (e.g., steel, auto, food)	9%	\$42
Emergency services (e.g., sheriff, corrections officer, dispatcher, firefighter, EMT)	6%	\$29
Laboratory/biotechnology	4%	\$49
Transportation (air & rail)	4%	\$45
Construction/civil engineering	4%	\$42
Retail/sales (e.g., real estate, auto, grocery)	3%	\$14
Electrical distribution and maintenance*	2%	–
Food processing*	1%	–
City maintenance*	1%	–
Miscellaneous (engineering services contractor, commercial driver, instrumentation/analyzer tech, mechanic, custodian, worship ministry director)	6%	\$29

* sample size too small

**Marathon Martinez
Worker Study:**

Medium Hourly Wage
Pre-Layoff: **\$50**

Medium Hourly Wage
Post-Layoff: **\$38**

43% of workers' new jobs
were union-represented

Economic Inequality and Pollution Burden in Contra Costa County

Figure 6. Pollution-burdened areas of Contra Costa County

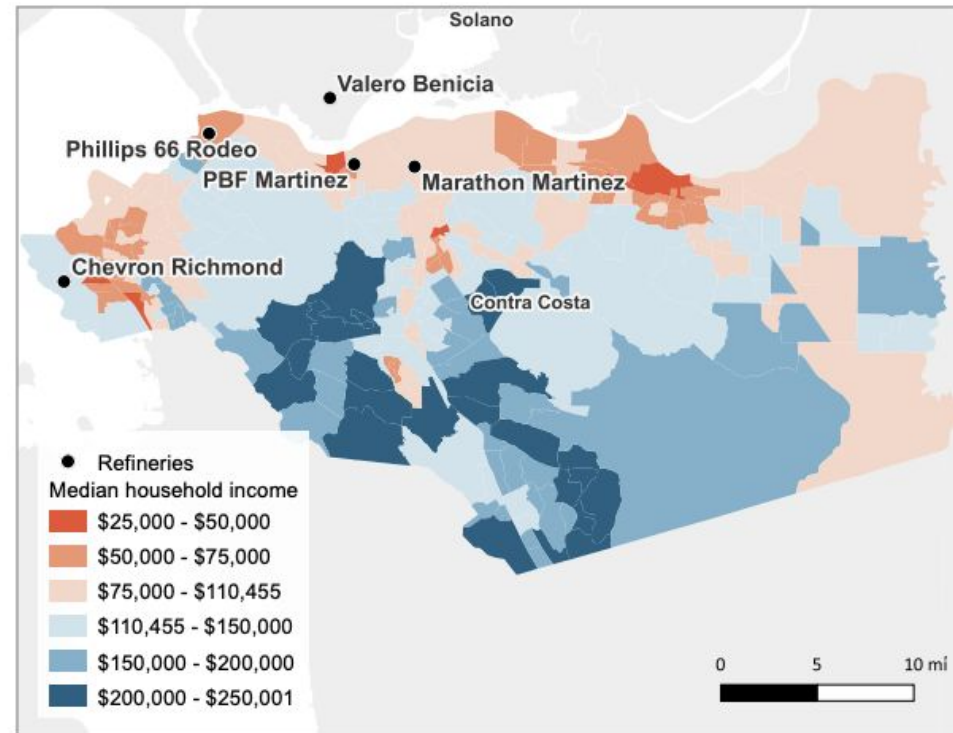
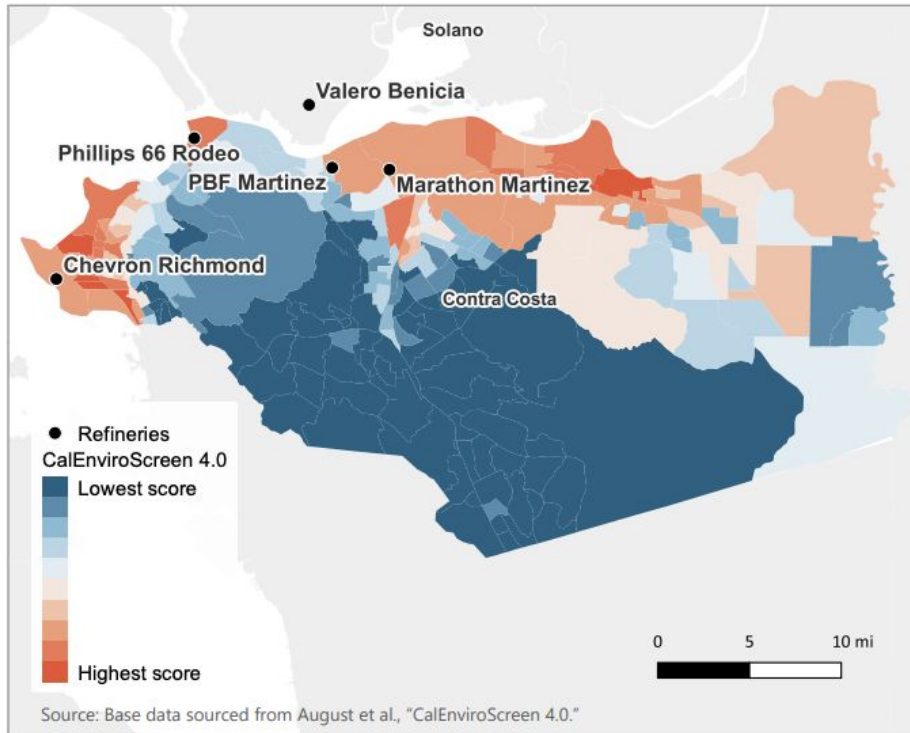


Figure 3. Median household income by census tract, Contra Costa (2021)

Source: U.S. Census Bureau, ACS 2021 (5-Year Estimates).

The Challenge: Wage Stagnation, Declining Unionization & Rising Inequality

Union Membership by Employer Sector, San Francisco-Oakland-Hayward MSA, 1990-2018



Source: Authors' analysis of data from Unionstats.com. Note: The San Francisco-Oakland-Hayward MSA includes San Francisco, Alameda, Contra Costa, Marin, and San Mateo counties.

Union membership and share of income going to the top 10%, USA (1918-2008)

