POSITION LETTERS (Attachment 3)

As of May 14, 2025

Attachment 3 includes City of Chino position letters on legislation and regulations submitted since the prior report. The attached letter(s) were submitted on behalf of the City during this reporting period.

EUNICE M. ULLOA
Mayor

CURTIS BURTON
Mayor Pro Tem

KAREN C. COMSTOCK
CHRISTOPHER FLORES
MARC LUCIO
Council Members

DR. LINDA REICH
City Manager

CITY of CHINO

April 10, 2025

The Honorable Anna Caballero
1021 O Street, Suite 7620
Sacramento, CA 95814

Re: Senate Bill 466 (Caballero), as Amended on 3/24/25 – The Chromium-6 MCL Compliance Safeguard Act

Dear Senator Caballero,

On behalf of the City of Chino, I am pleased to offer our strong support of SB 466 (Caballero), that will provide narrow legal protections for water providers who are acting in full compliance with a chromium (VI) ("Cr-6") Maximum Contaminant Level (MCL) Compliance Plan, to prevent unjustified and costly lawsuits, which divert time and resources away from efforts to comply with the Cr-6 MCL.

The City of Chino is responsible for providing safe, reliable, and high-quality water services to the community. This includes managing water resources, maintaining infrastructure, ensuring regulatory compliance, and promoting conservation to support long-term sustainability of the city's water supply.

The new regulation, which sets the Cr-6 MCL at 10 parts per billion (ppb), is now in effect and provides public water systems with a limited compliance period to meet the new Cr-6 standard. Larger public water systems (>10,000 service connections) must comply with this new directive within 2 years. Achieving compliance within this timeframe is not feasible for many water systems due to the need for significant infrastructure upgrades and financing required to comply. Smaller water systems (1,000 to 9,999 service connections and ≤1,000 service connections) face similar challenges.

Water providers do not seek relief from enforcement by the State Water Board (SWRCB) for exceeding the Cr-6 MCL. They do however have great concern about potential litigation following public notice of Cr-6 MCL exceedance.

SB 466 does not permanently shield a water agency from any harm caused and does not affect the State Water Board's enforcement authority. This legal protection would only apply for the limited period when a water provider submits a Cr-6 MCL Compliance Plan and remains in full compliance with the plan that is approved or waiting approval from the SWRCB.

SB 466 (Caballero) is a reasonable temporary measure to protect water providers acting in good faith to comply with the Cr-6 MCL from unnecessary litigation, allowing them to stay focused on their mission of providing safe and affordable drinking water to the communities they serve.

For these reasons, we are proud to support SB 466 (Caballero) and urge your AYE vote when it comes before you.

Sincerely,

Hye Jin Lee, P.E.
Director of Public Works

EUNICE M. ULLOA
Mayor

CURTIS BURTON
Mayor Pro Tem

KAREN C. COMSTOCK
CHRISTOPHER FLORES
MARC LUCIO
Council Members

DR. LINDA REICH
City Manager

CITY of CHINO

April 17, 2025

The Honorable Michelle Rodriguez
California State Assembly
1021 O Street, Suite 5640
Sacramento, California 95814

On behalf of the Chino Police Department, I respectfully submit this letter to express our strong opposition to Senate Bill 634. This bill would prohibit state and local governments from adopting or enforcing civil or criminal penalties against individuals experiencing homelessness for engaging in acts deemed "related to basic survival" in public spaces.

While we agree that homelessness is a humanitarian crisis that must be addressed with compassion and evidence-based solutions, SB 634 would effectively strip local jurisdictions of essential enforcement tools necessary to maintain public health, safety, and quality of life—for both housed and unhoused residents.

SB 634 would significantly impair the ability of local governments to manage unsafe and deteriorating conditions in public areas such as parks, sidewalks, business corridors, and neighborhoods. By broadly defining "basic survival" to include camping, sleeping, storing property, and erecting structures in public spaces—and by barring enforcement of long-standing ordinances—the bill limits the capacity of law enforcement, code enforcement, and local agencies to respond to even the most hazardous and unsanitary encampments.

The Chino Police Department has a dedicated Quality of Life Team that works tirelessly to engage with individuals experiencing homelessness. On average, the same individual may be contacted more than 50 times before accepting services. It often takes four to five attempts before an individual successfully enters and completes a treatment or service program and begins a path toward stability.

SB 634 imposes a blanket prohibition on enforcement without offering any viable alternatives for communities that are already strained by limited shelter capacity. Until both state and local governments are equipped to provide sustainable pathways to shelter and services, removing enforcement authority will only encourage the growth of unsanctioned encampments and reduce the likelihood that individuals will voluntarily seek assistance. This could lead to increased incidents of public defecation, improper waste disposal, and the spread of communicable diseases such as hepatitis and tuberculosis.

Each community faces distinct public safety and health challenges. SB 634 imposes a one-size-fits-all mandate that removes the ability of local governments to develop enforcement strategies tailored to their unique needs—ultimately compromising the safety and well-being of both the unhoused and the broader public.

As a law enforcement professional committed to preserving public safety, I believe SB 634's approach would be detrimental to our communities. Thank you for your attention to this important matter. Should you require further information or wish to discuss this in greater detail, please do not hesitate to contact me at (909) 334-3093 or via email at KMensen@chinopd.org.

Sincerely

Kevin Mensen, Chief of Police
Chino Police Department

EUNICE M. ULLOA
Mayor

CURTIS BURTON
Mayor Pro Tem

KAREN C. COMSTOCK
CHRISTOPHER FLORES
MARC LUCIO
Council Members

DR. LINDA REICH
City Manager

CITY of CHINO

April 23, 2025

The Honorable Governor Gavin Newsom
California State Capitol
1021 O Street, Suite 9000
Sacramento, CA 95814

RE: HOUSING LAW

Dear Governor Newsom,

On behalf of the residents, businesses, and stakeholders of the City of Chino, I write to firmly oppose the relentless proliferation of state housing laws that have overridden local control without regard for State-certified housing plans, effectively sidelining the voices of our community and undermining years of responsible local planning.

The City of Chino is a growing community of over 95,000 people. Our progress has been shaped by our philosophy of “smart growth,” which has allowed us to retain the small-town feel that has defined our community for generations. It’s the reason why more young families are choosing our community to grow and thrive, and the decades of dutiful planning that has crafted our community into one of the most desirable cities in the Inland Empire.

Since the elimination of redevelopment agencies (RDAs) in 2012, our City’s ability to retain local control over development has been chipped away year after year by a litany of housing bills designed to increase ministerial or by-right housing approval processes. While the City of Chino respects the pursuit of housing production amid a statewide crisis, the way forward is to work with cities to allow for growth in ways that make sense for their communities. Instead, cities have been virtually shut out of the process, and these new laws have diminished general plans, stripped away authority over local development, and left community members demanding answers from their local elected officials.

The Regional Housing Needs Allocation (RHNA), a distribution of housing units assigned to every California city, is an impossible number to attain that will not lead to the level of increased housing growth that it intends. The rigorous process of getting a housing element approved by the Department of Housing and Community Development (HCD) has left cities vulnerable to draconian penalties such as loss of grant funding and the Builder’s Remedy. Most importantly, the laws are not providing affordable housing as intended.

Local control continues to be undermined by a slew of new bills each year. These bills override general plans, ignore local zoning and land use plans, and steadily erode the ability of residents and their local representatives to shape the future of their communities. Despite Chino's opposition—as well as that of the League of California Cities and other municipalities statewide—we have been inundated with legislation that further limits our ability to plan for growth responsibly. SB 423 (Weiner, 2024), which significantly expanded ministerial approvals for affordable housing projects; SB 4 (Weiner, 2024), which requires a housing development project to be a "use by right" on land owned by an independent institution of higher education or a religious institution; and SB 9 (Atkins, 2021), which allows homeowners to subdivide their lots and add up to two duplexes in most single-family neighborhoods, are just a small example of how the new laws diminish local control.

This year, many onerous bills have been introduced that will impose additional state housing dictates on issues of critical local significance. One such example, SB 79 (Wiener), defies cities' general plans and grants transit agencies unlimited land use authority on property they own or on which they have a permanent easement, regardless of the distance from a transit stop. Transit agencies would have the power to determine all aspects of development, including height, density, and design, without regard to local zoning or planning regulations.

And yet, housing prices are still spiraling out of control. It is imperative that we raise the question of how the state plans to evaluate these housing policies when the intended outcomes are currently not being achieved.

As Mayor of Chino, I have heard from my constituents, as well as local officials in neighboring cities, about the effects of these new housing laws. Our communities are suffering, and Sacramento has regrettably turned a blind eye to the effects these laws have had on cities across California.

The time to act is now. I ask that you meet with me and the City of Chino so we can work together on a sustainable, reasonable process that addresses this decades-in-the-making housing crisis while keeping cities in the conversation and allowing us to grow in ways that include local discretion and public engagement. Please contact Deputy City Manager Vivian Castro at vcastro@cityofchino.org or 909-334-3307 to schedule a meeting. Thank you.

Sincerely,

Eunice M. Ulloa

Eunice Ulloa
Mayor

cc: Senator Scott Weiner
Senator Susan Rubio
Assemblymember Michelle Rodriguez
Assemblymember Phillip Chen
League of California Cities

EUNICE M. ULLOA
Mayor

CURTIS BURTON
Mayor Pro Tem

KAREN C. COMSTOCK
CHRISTOPHER FLORES
MARC LUCIO
Council Members

DR. LINDA REICH
City Manager

CITY of CHINO

April 24, 2025

Assemblymember Nick Schultz
Chair, Assembly Public Safety
1020 N Street, Room 111
Sacramento, CA 95814

RE: AB 63 (RODRIGUEZ) - SUPPORT

Dear Chair Schultz:

On behalf of the City of Chino, I write in support of AB 63, which will reinstate Penal Code 653.22, which prohibited loitering in a public place with the intent to commit prostitution and made it a misdemeanor. The City also supports the additional provision in the bill that will clearly prohibit the arrest of an individual for solicitation based solely on the individual's gender identity or sexual preference.

Human Trafficking has plagued our state and the Sacramento region for years. It is growing to unprecedented levels and is one of the fastest-growing criminal enterprises. With the passage and enactment of SB 357 in 2022, which eliminated Penal Code 653.22, it has been increasingly difficult to investigate and prosecute solicitation violations. Prostitution and human trafficking have exploded in our state due to the lack of enforcement actions, as the new law ties law enforcement's hands. Sex workers now blatantly walk the streets in full view of the public without fear of impunity. Businesses in our communities have been forced to close during evening hours due to safety concerns. Just in the past year, there have been over 300,000 commercial sex ads in the Sacramento region alone. Additionally, with advanced technology and social media apps, law enforcement has been losing the battle in this arena. Human Traffickers religiously use their smart devices to further their criminal empire.

I strongly support AB 63 because it will make our streets safer and provide us with the tools to fight this ever-growing crisis. I also support the additional provision prohibiting arrests of individuals based on their sexual orientation or gender identity. The Sacramento Sheriff's Department has never focused its enforcement efforts on those specific individuals and any law enforcement agency that does should be held accountable.

In conclusion, the City of Chino supports and commends Assembly Member Rodriguez's effort to reinstate Penal Code 653.22. AB 63 will make our communities safer and allow us to successfully pursue human traffickers.

Please contact Chief of Police Kevin Mensen at kmensen@chinopd.org or 909-334-3307 if you have any questions. Thank you.

Sincerely,

Linda Reich
City Manager

cc: Senator Susan Rubio
Assemblymember Michelle Rodriguez
Assemblymember Phillip Chen
League of California Cities

EUNICE M. ULLOA
Mayor

CURTIS BURTON
Mayor Pro Tem

KAREN C. COMSTOCK
CHRISTOPHER FLORES
MARC LUCIO
Council Members

DR. LINDA REICH
City Manager

CITY of CHINO

April 25, 2025

The Honorable Mark González
California State Assembly
1021 O Street, Suite 6150
Sacramento, CA 95814

RE: AB 647 (González, M.) Housing Development Approvals: Residential Units - Notice of OPPOSITION (As of 3/28/25)

Dear Assembly Member González,

The City of Chino must oppose your AB 647 (González), which would disregard state-mandated local housing elements and force cities to allow up to eight housing units — only one of which is required to be affordable — on lots with an existing single-family home or in an area zoned for eight units or less, without any environmental review or public input.

AB 647 would empower developers to bulldoze nearly any home and replace it with eight new units. Once those units are constructed, Government Code Section 66323(a)(4) requires local jurisdictions to allow up to an additional eight ADUs on the same lot, bringing the total allowable units to sixteen, while simultaneously ignoring existing height limits, density requirements, and parking standards.

While we appreciate your desire to boost housing production, AB 647 ignores local flexibility, decision-making, and community input, which are critical components that, coupled with ongoing, dedicated funding, can help spur desperately needed housing construction in the state.

AB 647 and other ministerial or by-right housing approval processes fail to recognize the extensive public engagement and costs associated with developing and adopting zoning ordinances and state-mandated housing elements that are certified by the California Department of Housing and Community Development. It is concerning that cities are being forced to spend tens of thousands of dollars on housing plans only to have them pushed aside and replaced with one-size-fits-all zoning dictated by the Legislature.

Since the elimination of redevelopment agencies (RDAs) in 2012, our City's ability to retain local control over development has been chipped away year after year by a litany of housing bills designed to increase ministerial or by-right housing approval processes. While the City of Chino respects the pursuit of housing production amid a statewide crisis, the way forward is to work with cities to allow for growth in ways that make sense for their communities. Instead, cities have been virtually shut out of the process, and these new laws have diminished general plans, stripped away authority over local development, and left community members demanding answers from their local elected officials.

For these reasons, the City of Chino opposes AB 647 (González).

Sincerely,

Linda Reich
City Manager

cc: Senator Susan Rubio
Assemblymember Michelle Rodriguez
Assemblymember Phillip Chen
League of California Cities, cityletters@cacities.org

Join the City of Chino

OPPOSE the SCAQMD Rules 1111 & 1121

A flawed scheme that will make Southern California even more unaffordable!

Southern California's cost-of-living crisis is crushing working families and small businesses. With record-breaking taxes and massive increases in housing and electricity costs, leading to the highest poverty rate in the country. California's cost of living is 42% higher than the national average, even higher in some of our local Southern California communities.

The South Coast Air Quality Management District (SCAQMD) is proposing amendments to existing rules (1111 & 1121) that would impose an expected annual tax of $306 million on homeowners, renters, schools, and small businesses – an **average of $1,510 per household!**

Unless defeated, Proposed Amended Rules (PAR) 1111 and 1121 would be the costliest rulemaking SCAQMD has ever undertaken. Join us in OPPOSING these costly rules!

MARK YOUR CALENDAR:
The SCAQMD Governing Board will vote on PAR 1111 & 1121 on **June 6 at 9 AM**, and we need your voice to persuade the Board to oppose these costly rules. This meeting is our final chance to make our voices heard! Click here to join the meeting virtually. Click here to join the meeting virtually. The meeting agenda can be accessed here.

TAKE ACTION TODAY!
Your support has been crucial in our fight to protect the cost of living from getting even higher – but we need to keep the momentum going! See the ways you can help below:

1. **Submit a Letter as an Impacted Resident** – Utilize the *"Take Action" feature on the Cost of Living Council website* to submit a letter to the Board as a resident impacted by these rules. If you live in Los Angeles, Orange, Riverside, or San Bernardino counties, this will directly affect you as a resident.
2. **Submit a Letter on Behalf of Your Business or Organization** – Download and customize the updated *template opposition letter*, urging the Board to OPPOSE PAR 1111 & 1121 on behalf of your business or organization. Please send a copy of your letter to Sam@SwingStrat.com.
3. **Spread the Word** – Help raise awareness by sharing with your family, friends, neighbors, and colleagues! **Forward this email to your network and encourage them to submit individual letters!**

Say NO to PAR 1111 & 1121:
- Higher costs for homeowners, renters, & small businesses
- Skyrocketing energy bills
- Costly retrofit & electric panel upgrades for older properties
- Adds strain to aging electrical grid & infrastructure
- Puts public safety and health at risk

For more information, please visit https://www.WeCantAffordThis.com/

COST OF LIVING COUNCIL

Committed to a More Affordable Future

ESTIMATED ECONOMIC IMPACT OF SCAQMD DRAFT RULES 1111 AND 1121

March 2025

www.WeCantAffordThis.com

COST OF LIVING COUNCIL
Committed to a More Affordable Future

WeCantAffordThis.com

Executive Summary

Economic Impact of SCAQMD Draft Rules 1111 and 1121

The Cost of Living Council has released an economic impact report on the South Coast Air Quality Management District (SCAQMD) revised proposed amendments to Rules 1111 and 1121. SCAQMD has proposed regulations aimed at reducing nitrogen oxide (NOx) emissions from residential and commercial heating systems. The proposal introduces a phased transition to zero-NOx space and water heating units, applying new fees to NOx-emitting units based on increasing sales targets for zero-NOx models over time.

The proposed rules will cost consumers living in the four-county SCAQMD region $7.7 billion over the 25-year lifecycle of these appliances.

Homeowners and landlords who continue to install gas-fired appliances would pay fees of **$100 per furnace and $50 per water heater**, with additional penalties ranging from $500 to $800 for manufacturers if zero-NOx sales targets are not met. While the proposal does not outright ban NOx-emitting units, the fee structure is designed to make electric alternatives more financially attractive. However, given the significantly higher upfront costs of zero-NOx units, the proposal could lead to substantial increases in household expenses, particularly for those replacing existing gas appliances.

CONSUMER AND COST OF LIVING IMPACTS

- **Direct Cost Increases:**
  - Households replacing a gas-fired furnace and water heater would face average **additional fee costs of approximately $1,510 per event,** adding to their overall housing expenses.
  - These fees equate to about **2% of the median renter income** and **1% of the median homeowner income** in the region.
  - Fees alone amount to **74% of the median monthly rent and 65% of homeowner costs**, effectively adding almost an extra month's worth of housing expenses.

- **Compliance Schedule Costs:**
  - The proposed schedule to transition all homes in the district to zero-NOx units between 2027 and 2040 would result in **total costs of $8.9 billion annually**.
  - For homeowners, replacing both a furnace and water heater with zero-NOx units would cost **$47,800 for single-family homes and $40,100 for a multi-family rental unit**.
  - These costs represent **39% of the median homeowner's income and 59% of the median renter's income**, posing significant affordability challenges.

- **Economic & Job Loss Impacts:**
  - The proposed fee structure is projected to result in **annual job losses of 1,800**, a **$118.9 million reduction in labor compensation**, and a **$232.5 million decrease in regional GDP**.
  - If **full compliance** with the zero-NOx transition schedule is required in the future, economic impacts would be significantly greater, **including 36,500 lost jobs annually and a $6.2 billion reduction in regional GDP**.

- **Energy Costs & Housing Market Effects:**
  - Projected energy savings are <u>minimal</u>, as most consumers would opt for NOx-emitting units unless subsidies cover the entire incremental cost of a zero-NOx alternative.
  - Electricity prices are expected to continue rising, while natural gas prices are projected to decline. This means that the **shift toward electric appliances could increase long-term energy expenses for consumers**.
  - **Older rental units face higher costs**: 85% of rental units and 83% of owner-occupied units were built before 2000, meaning significant infrastructure upgrades could be required to accommodate zero-NOx units.
  - **Rental prices could increase**: Renters may indirectly bear these costs through higher rents, though rent control laws may delay full cost pass-throughs.

CONCLUSION

If implemented, the proposed regulations **would impose significant costs on homeowners, landlords, and renters**, with fees adding financial pressure on those replacing heating equipment. The higher upfront cost of zero-NOx units could make compliance challenging, especially for lower-income households, while the expected rise in electricity prices may offset any potential energy savings. The economic impact extends beyond individual households, with potential job losses, reduced consumer spending, and higher housing costs. Renters could see indirect cost increases as landlords pass expenses through rent hikes, while older housing units may require costly electrical upgrades to support zero-NOx systems. Overall, the proposal introduces new financial burdens that could worsen California's already high cost of living, particularly for those in the most vulnerable economic positions.

ABOUT THE COST OF LIVING COUNCIL

We are a coalition of homeowners, renters, workers and small businesses from across the SCAQMD region working to fight back against the high cost of living in Southern California. The Cost of Living Council is dedicated to creating a more affordable future in Los Angeles, Orange, Riverside, and San Bernardino counties—among the most expensive housing markets in the nation—where residents are struggling to afford rent and basic expenses due to costly regulations imposed without public input.

Join Our Coalition Today.

Say NO to Proposed Amended Rules 1111 & 1121

COST OF LIVING COUNCIL

Committed to a More Affordable Future

COST OF LIVING COUNCIL
Committed to a More Affordable Future

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Summary

The following analysis covers the revised proposed regulations released on February 28. Overall, this revision removes the sales mandate and instead replaces the previous provisions with new fees presumably intended to help bridge the cost gap with zero-NOx units and fund a new subsidy program. The revisions, however, retain a compliance schedule that is used to scale the proposed fees. Note that all dollar amounts in this summary have been updated where appropriate to $2025 from the $2023 used at various points in the text, using projections from Department of Finance.

Assuming the maximum level of fees and existing distributions of housing and appliances, the revised fee proposal would impose annual costs of $306 million on gas-fired (and other NOx emitting) space and water heaters. Energy cost savings are negligible since this analysis assumes households/landlords would purchase a non-NOx unit only if the higher cost increment was fully subsidized. They would otherwise choose their equipment based on cost given the current environment of heightened concerns over the cost of living in the state and continually rising electricity costs. The fees consequently would be a significant new added cost simply to replace equipment already in place in their homes.

The proposed compliance schedule while having no binding force in this current version, still portrays the vision of where staff wants to take housing in the District. Replacing current NOx units as outlined in this schedule requires total average annual costs of $8.9 billion in the period 2027-2040. This number incorporates average annual capital costs of $9.3 billion partially offset by $379 million in average annual energy savings and $4.4 million in fee costs.

The total fee costs of $306 million are equivalent to $48 annually per housing unit in the District. These costs, however, will not be felt uniformly. A home requiring replacement of both the furnace and water heater in the same year—even if they are kept as gas units—will face average additional fees costs of $1,510. To put this amount in context:

- It is equivalent to 2% of median renter income in the region in 2023, and an effective 1% tax on owner median income.

- This amount is 74% of the median monthly renter housing costs in 2023, and 65% for owners. This is the equivalent of adding almost another month of housing costs (rent/mortgage/utilities/property taxes) in the region.

Costs under the revised proposal translate (direct, indirect, and induced impacts) into annual job losses of 1,800, labor compensation (wages, salaries, and benefits) reduction of $118.9 million, regional GDP by $232.5 million, and regional sales by $359.2 million.. These are annual amounts based on the average annual costs during 2027-2040. The associated fiscal losses from these impacts show combined annual local and state taxes lower by $28 million.

While sales of zero-NOx units under the compliance schedule are not mandated in this version, doing so would produce higher annual job losses of 36,500, labor compensation reductions of $2.5 billion, regional GDP lower by $6.2 billion, and sales down by $8.4 billion. Local and state revenues would be reduced by a total of $876 million annually.

Reflecting the current distribution of housing in the region, renters and homeowners would experience the fee impacts at nearly equal levels, with homeowners paying the fees directly and renters indirectly through upward pressure on rents.

Due to the relative costs, homeowners would face higher costs if instead they chose to replace their existing units with zero-NOx appliances:

- A homeowner replacing both their furnace and water heater would face additional costs of $47,800 for single family detached, while a renter could see rent pressures coming from $40,100 for a multi-family unit.

- The costs are lower for rental units, but there is a distinct difference in ability to pay. The homeowner costs are equivalent to 39% of median household income in 2023, while the rental costs are 59% of median renter household income.

- The actual costs, however, will depend on the additional system work required especially in older homes and in multi-family complexes. Actual construction data submitted by BizFed from two multi-family developments indicates that replacement costs were 50% higher than the factors used in this report due to other building, site, and distribution modifications that were required.

- Rental units in the region also are older, with 63% of the region's rentals being built in 1979 or earlier compared to 57% of owner-occupied units. Overall, 83% of owner-occupied and 85% of rental units were built prior to increasing electricity demand as the result of rising use of electronics and electric appliances in 2000 and beyond.

Additional considerations include:

- Based on national data, mechanical system (plumbing, electricity, HVAC) costs have moved from 4th largest component of housing construction costs in 2017 to 2nd largest in the latest data for 2024. In this period, the systems covered by the proposed rules were responsible for about a quarter of the total rise in construction costs and consequently housing prices. The rules will push this further.

- Energy cost numbers are based on estimates and projections contained in the various source documents. However, natural gas prices are now expected to fall while electricity prices remain on a continuous rise. The recent projections from EIA expect residential natural gas prices to fall 3.3% in real terms between 2024 and 2026 in the Pacific states.

- The energy prices used in the cited documents generally use average electricity rates. The state, however, is pushing time-of-use electricity prices as a conservation designed in part to cope with concerns over energy reliability engendered by the state's overall energy policies and building restrictions. This provision likely will push energy use more into the higher cost periods especially for households with two earners.

- Spillover effects on prices are not likely in most of the region as all or nearly all of housing in three of the counties will be subject to these rules. San Bernardino is the exception, with about a quarter of the housing lying outside the District's boundaries and is otherwise relatively isolated from other retail centers. This diminished market size combined with price increases coming from the mandated offerings in the District portion are likely to have at least some spillover effect on these households as well.

Background

South Coast Air Quality Management District (SCAQMD) has proposed two regulations to require replacement of space and water heating equipment with zero emission alternatives. As originally proposed:

- Proposed Amended Rule 1111 – Reduction of NOx Emissions from Natural Gas-Fired Furnaces, in addition to other provisions, would have applied to new equipment beginning January 1, 2026, and to replacement equipment beginning January 1, 2028, except for mobile homes which would have a two-year delay. Both residential and commercial units would have been affected. The Draft Subsequent Environmental Assessment (DEA)[1] estimates the rule would have covered 5.35 million units in the District (112,000 commercial) but gives no basis for these figures. However, previous staff presentations suggest the numbers come from the 2021 American Housing Survey (AHS).

- Proposed Amended Rule 1121 – Reduction of NOx Emissions from Residential-Type, Natural Gas-Fired Water Heaters would have applied to new equipment beginning January 1, 2026, and to replacement equipment beginning January 1, 2027, except for mobile homes which would have a three-year delay. Only residential units would have been affected. The DEA estimates the rule would have covered 5.128 million units but also gives no basis for this figure.

Staff has since amended these provisions.[2] In the current revised proposal:

- Applicability of the regulations will revert back to the existing 175,000 Btu/hr provision from the 2 million Btu/hr expansion originally proposed. These higher Btu units instead will be addressed in a future rulemaking.

- Both NOx-emitting and zero-NOx units can be sold in the District for both existing and new construction, but with a phase-in target schedule for the zero-NOx units.

- NOx-emitting units will be subject to a fee of $100 per furnace and $50 per water heater.

[1] South Coast Air Quality Management District, Draft Subsequent Environmental Assessment, Proposed Amended Rule 1111 – Reduction of NOx Emissions from Natural Gas-Fired Furnaces, and Proposed Amended Rule 1121 – Reduction of NOx Emissions from Small Natural Gas-Fired Water Heaters, September 2024.

[2] Third Preliminary Draft Proposed Amended Rule 1111. Reduction of NOx Emissions from Natural Gas-Fired Furnaces, February 28, 2025; Third Preliminary Draft Proposed Amended Rule 1121. Reduction of NOx Emissions from Residential Type, Natural Gas-Fired Water Heaters, February 28, 2025.

- Both types of equipment will be subject to an annual zero-NOx sales target ranging from 30% of units sold in 2027-28 to 90% in 2036 and after. Units sold over the target in each year will be subject to an additional fee ranging from $500 in 2027-28 to $800 in 2036 and after. In years when the targets are exceeded, these fees would be reduced for the affected manufacturer.

- The revised proposal contains no provision to adjust these fees based on inflation. However, the District instead more generally addresses this issue through periodic fee adjustments. In an inflationary environment, the analysis assumes the proposed fees would be handled in the same manner.

These revisions essentially shift applicability of the rules to manufacturers.

Figure 1: Estimated SCAQMD Housing Units, Share by County, 2023

Source: ACS 5-year Estimates, 2019-2023

MSA	County	Total Units	Owner Occupied	Owner Vacant	Total Owner	Renter Occupied	Renter Vacant	Total Renter
Inland Empire	Riverside	99%	100%	98%	99%	99%	100%	99%
	San Bernardino	73%	73%	70%	72%	74%	72%	74%
	MSA	87%	88%	86%	88%	86%	89%	86%
LA-Orange	Los Angeles	98%	98%	98%	98%	99%	98%	99%
	Orange	100%	100%	100%	100%	100%	100%	100%
	MSA	99%	98%	99%	98%	99%	98%	99%
Total District		96%	95%	93%	95%	97%	97%	97%

Baseline housing numbers to identify the potential universe affected by these proposals are derived primarily from three datasets: American Community Survey (ACS), American Housing Survey (AHS), and California Department of Finance (DOF). Most housing data is at best available at the county or MSA level, but SCAQMD covers all of Orange County and only a portion of the other three counties. The share of each county's housing within the District instead was estimated using the ACS Zip Code data, as almost all of the relevant zip codes are fully contained within the District's boundaries. As indicated in Figure 1, an estimated 97% of all housing units within the 4 counties lies within the District, but this share varies by county, ranging from 100% in Orange County to 75% for San Bernardino. In the tabulations, the "other vacant" category in the ACS numbers was included under owner occupied as it is assumed that most of these units are second/vacation homes.

Figure 2: Alternative Housing Estimates, 2023

Source: see text

MSA	County	DOF	ACS	AHS
Inland Empire	Riverside	872,930	860,042	
	San Bernardino	748,186	738,535	
	MSA	1,621,116	1,598,577	1,519,976
LA-Orange	Los Angeles	3,664,191	3,624,084	
	Orange	1,149,943	1,138,473	
	MSA	4,814,134	4,762,557	4,597,824
Total MSAs		6,435,250	6,361,134	6,117,800

The number of housing units within the District in 2023 and subsequent years are projected based on the following factors:

- As shown in Figure 2, the primary sources for housing show an average range of about 5% in their estimates, with the differences between Department of Finance (DOF) [3] and the other sources somewhat narrower in Los Angeles-Santa Ana and somewhat higher for the Inland Empire. In the calculations, the DOF numbers (2023 and 2024) are taken as the base given that they derive in part from multiple original sources rather than just surveys. The current DOF projections (vintage 2020), however, are too high given recent year population and housing permit trends. The DOF 2024 estimates indicate that 54% of housing units in the region are single-family detached. Just over 3% are mobile, meaning this factor does not affect the calculations significantly.

- Population in the District and region is not expected to change much over the projection period. The current DOF estimates (2024 vintage) show net migration from the region remaining negative through 2023 before going slightly positive in the subsequent years. Incorporating natural changes, regional population is projected to grow by only 0.2% a year through 2028.

- Total housing permits issued in the 4 counties[4] covered 52,300 units in 2023 and 33,400 in 2024. Permits in 2025-2040 are assumed at the average, or 42,800 annually, of which about one-third are single family units and, including accessory dwelling units (ADUs) in this category, multi-family at two-thirds. This number varies dramatically between the MSAs, with Inland Empire at 58% single family and LA-Orange at only 17%.

- Permits do not always translate into new housing units in particular in the same year. Census Bureau data for the Western States indicates housing starts averaged 94% of housing permits in the period 2022-2024, a factor that is applied to the permit numbers.

- The results are further adjusted to account for the portion of permits going to replacement rather than new housing due to demolitions and conversions, at 0.15% in a typical year. [5] Housing lost during the recent Los Angeles fires is assumed to be replaced during this period over and above the numbers previously. This additional factor, however, could put pressure on available labor and material supplies and affect the overall number of permits issued in this period.

- The county estimates are then adjusted to District estimates, using the factors in Figure 1.

- This approach implicitly assumes there will be no substantial change in mortgage and other interest rates. This approach also assumes that California will continue to attempt housing reform only through proposals that also include countervailing cost and regulatory provisions of the type that have severely limited the results from such efforts to date.

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[3] California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2021-2024, with 2020 Benchmark, May 2024.
[4] Construction Research Industry Board, Housing Data.
[5] Dowell Myers, JungHo Park, Janet Li, How Much Added Housing is Really Needed in California?, USC, Sol Price School of Public Policy, August 2018.

Figure 3: Projected SCAQMD Housing Units

MSA	County	2023	2026	2027
Inland Empire	Riverside	868,000	895,000	904,000
	San Bernardino	547,000	557,000	560,000
	MSA	1,415,000	1,452,000	1,464,000
LA-Orange	Los Angeles	3,598,000	3,652,000	3,663,000
	Orange	1,150,000	1,170,000	1,176,000
	MSA	4,748,000	4,822,000	4,839,000
Total District		6,163,000	6,274,000	6,303,000

Housing Demographics & Characteristics

Demographics and the relevant characteristics of housing in the region are estimated by MSA using the AHS Public Use File (PUF) microdata from 2023.

Figure 4: Region Households by Income & Tenure, 2023

Source: AHS calculations

MSA	Tenure	$50,000 & Below	$50,001 to $100,000	$100,001 to $200,000	$201,000 & Above	Total
Inland Empire	Rent	45%	33%	18%	12%	31%
	Own	55%	67%	82%	88%	69%
	Total	100%	100%	100%	100%	100%
LA-Orange	Rent	69%	62%	44%	22%	54%
	Own	31%	38%	56%	78%	46%
	Total	100%	100%	100%	100%	100%
Total MSAs	Rent	63%	54%	38%	20%	48%
	Own	37%	46%	62%	80%	52%
	Total	100%	100%	100%	100%	100%

Housing by Tenure is almost evenly split between owners and renters. The Inland Empire, however, has a much higher incidence of owners, while the share of renters in Los Angeles-Santa Ana is relatively higher. This relationship extends across all groups, with owners the majority at every level in Inland Empire but renters dominating household incomes below $100,000 in LA-Orange.

Figure 5: Region Households by Ethnicity/Race & Tenure, 2023

Source: AHS calculations

MSA	Tenure	Latino	White	Black	Asian/PI	Other	Total
Inland Empire	Rent	36%	23%	42%	22%	45%	31%
	Own	64%	77%	58%	78%	55%	69%
	Total	100%	100%	100%	100%	100%	100%
LA-Orange	Rent	65%	45%	72%	40%	64%	54%
	Own	35%	55%	28%	60%	36%	46%
	Total	100%	100%	100%	100%	100%	100%
Total MSAs	Rent	57%	39%	63%	38%	60%	48%
	Own	43%	61%	37%	62%	40%	52%
	Total	100%	100%	100%	100%	100%	100%

The same pattern is also seen by race and ethnicity. Ownership is the majority form of tenure across all groups in the Inland Empire, while renting is the majority for all groups except non-Latino Whites and non-Latino Asian/Pacific Islanders in Los Angeles-Santa Ana.

Figure 6: Region Households by Nativity, 2023

Source: AHS calculations

MSA	Tenure	Native Born	Foreign Born, Not a Citizen	Foreign Born, Naturalized	Total
Inland Empire	Rent	30%	49%	23%	31%
	Own	70%	51%	77%	69%
	Total	100%	100%	100%	100%
LA-Orange	Rent	52%	76%	42%	54%
	Own	48%	24%	58%	46%
	Total	100%	100%	100%	100%
Total MSAs	Rent	46%	71%	38%	48%
	Own	54%	29%	62%	52%
	Total	100%	100%	100%	100%

By nativity, naturalized citizens were far more likely to be owners in both MSAs and in the region, while non-citizens were conversely far more likely to be renters. Note that due to the nature of surveys, this last group is likely to be undercounted in the region.

In 2023, only 13% of the region's households had electric water heaters. The dominant type at 85% used natural gas, while 1% relied on other fuels such as bottled gas and fuel oil and only an insignificant number had no domestic water heating. Note that these numbers only count households, and some may have more than one water heating unit. Because of the lack of data, this factor is not addressed in the subsequent calculations.

Figure 7: Region Residential Water Heating by Fuel, 2023

Source: AHS calculations

MSA	Tenure	Electricity	Piped Gas	Other	Total
Inland Empire	Rent	17%	81%	2%	100%
	Own	12%	84%	4%	100%
	Total	14%	83%	3%	100%
LA-Orange	Rent	18%	81%	1%	100%
	Own	8%	91%	1%	100%
	Total	13%	86%	1%	100%
Total MSAs	Rent	18%	81%	1%	100%
	Own	9%	89%	2%	100%
	Total	13%	85%	1%	100%

In 2023, the equivalent of 67% of the region's housing units relied on piped gas for the primary or secondary heating, while 25% used electricity of which only 2% were heat pumps. Another 30% used other appliances including portable heaters, fireplaces, stoves, and appliances run on other fuels. Only a negligible 1% had no heating. The numbers in the table sum to more than 100% because many units have more than one heating source. The estimates are based on allocations from using Main House Heating Fuel as the control variable.

Figure 8: Region Residential Heating by Fuel, 2023

Source: AHS calculations

MSA	Tenure	Piped Gas Furnace	Piped Gas Wall/Floor Unit	Electric Furnace	Electric Heat Pump	Electric Wall/Floor Unit	Other	Total
Inland Empire	Rent	44%	12%	26%	1%	10%	21%	114%
	Own	72%	5%	15%	1%	2%	24%	119%
	Total	63%	7%	18%	1%	4%	23%	118%
LA-Orange	Rent	34%	22%	21%	2%	13%	31%	123%
	Own	68%	9%	16%	2%	4%	24%	123%
	Total	50%	16%	19%	2%	9%	28%	123%
Total MSAs	Rent	35%	20%	22%	2%	12%	29%	121%
	Own	69%	8%	16%	2%	3%	24%	122%
	Total	53%	14%	19%	2%	8%	27%	122%

Affected Universe

The previous factors are used to estimate the universe of affected equipment:

- For water heaters, the replacement universe is calculated from the District housing stock numbers in Figure 3. The number of gas fired units in 2027 is then estimated by applying the distributions shown in Figure 7. The results estimate a total of 5.54 million replacement units in 2027 compared to 5.128 million (no date) in the District's DEA. New units are estimated from the new housing permit assumptions adjusted to housing starts and the portion within the District, or an additional 38,700 units beginning in 2027. Current state building code requires new units to be electric ready, but does not require consumers to buy these units. This approach assumes that current purchasing patterns are unlikely to shift significantly in the next 3 years, a reasonable assumption given the current consumer cost sensitivity due to the overall rise in costs of living and specifically soaring electricity prices in California. Consumers are assumed to buy units based on existing distributions due to cost concerns until they are forced to do otherwise.

- Space heating replacements are estimated in the same manner using Figures 1 and 8. These results are further broken down into single family detached and multi-family again using the PUF microdata. The results estimate a total of 4.34 million replacement units in 2027 compared to 5.238 million in the District's DEA, plus new units as estimated previously. Commercial units in spaces of less than 5,000 square feet are still likely to be subject to these provisions. An earlier staff estimate of 100,000 units is used for this aspect.

  The reasons for the higher DEA estimate are unclear as there is no indication of how this number was determined, nor do the previous staff presentations on the proposed rule other than stating it was based on statewide estimates for 2020 from US Energy Information Administration (EIA). Using the EIA's source data—Residential Energy Consumption Survey (RECS) microdata—and applying it to the county housing numbers results in a somewhat lower estimate of 4.0 million units. Applying an alternative source—ACS 2023 microdata for the 4 counties—produces an equivalent number at 4.2 million. Consequently, the 4.22

million estimate is used in the analysis. Adjusting to the DEA's 5.238 million would increase the estimated annual average replacement costs by about $500-$600 million.

Cost Estimates

Replacement cost estimates and the cost increments for new construction are based on data contained in: (1) Ramboll[6] in an attachment to SCG's October 17, 2024 Comments on Proposed Amendments to Rule 1111 and Rule 1121, (2) the October 3, 2024 comments from BizFed, and (3) where required, additional cost components based on discussions with HVAC contractors and various on-line construction cost estimating apps. Space heating costs are based on replacement/installation of the heating unit only and do not address combination heating/air conditioning units. The Ramboll energy cost estimates incorporate consideration of how different building types (i.e., single family vs. multi-family) affect the overall averages.

For water heaters, the BizFed analysis indicates that 120V models are highly unlikely to meet consumer demands in many situations, and that the higher cost 240V models will be required instead. The analysis uses a weighted average of the two based on the 2024 purchasing distribution in the most current staff presentation.[7] Energy costs are from the Ramboll analysis, with electricity costs increased in accordance with the updated December electricity price forecasts[8] from the Energy Commission.

Space heating costs similarly are taken from the SCG comment letter, with the multi-family component adjusted based on the Ramboll capital cost estimates. Annual energy use is taken from the Ramboll analysis.

Figure 9: Cost Factors

Sources: see text; $2023

	Natural Gas				Heat Pump				
	Water Heater	*SF Space Heating*	*MF Space Heating*	*Floor/Wall Heater*	*Water Heater 120 V*	*Water Heater 240 V*	*SF Space Heating*	*MF Space Heating*	*Floor/Wall Heater*
Useful Life, Years	15	25	25	25	15	15	25	25	25
Capital Cost	$1,700	$6,600	$4,500	$4,000	$4,400	$31,100	$24,100	$16,700	$27,300
Average Annual Fuel Costs, 2026-40	$580	$470	$170	$160	$430	$370	$380	$170	$160

Replacements are assumed to follow a straight-line pattern based on equipment useful life. All numbers are adjusted to $2023 as shown in Figure 9 using the GDP Implicit Price Deflator including projections from the Energy Commission. The capital costs (equipment plus installation) for replacements incorporate panel upgrades based on SCAQMD staff assumptions and the revised

[6] Ramboll, Comments on South Coast Air Quality Management District's (South Coast AQMD's) Cost-Effectiveness Calculations for Proposed Amended Rules (PAR) 1111 AND 1121, memo to Southern California Gas Company, October 16, 2024.
[7] California Energy Commission, Proposed Amended Rule1111– Reduction Of NOx Emissions From Natural-Gas-Fired, Fan-Type Central Furnaces (PAR 111) and Proposed Amended Rule 1121– Control of Nitrogen Oxides From Residential Type, Natural Gas-Fired Water Heaters, Staff Presentation (PAR 1121), Public Consultation, March 6, 2025.
[8] California Energy Commission, California Energy Demand, 2024-2040, accessed March 2, 2025.

staff presentation, although this added expense likely will be required in a larger share of existing housing units. The actual cost also may be higher depending on the total amount of work required including potentially distribution upgrades given that much of this work will occur during a period when other electricity mandates are being made on housing.

For example, data provided by BizFed[9] using the results from two older multi-family projects in Orange County indicates per unit costs of $37,106 to replace water heaters in a 500+ unit development and $72,825 to replace both water heaters and furnaces in a 300+ unit development. Actual equipment costs were only $4,780 in the first case, and $18,443 in the second. These real-world results suggest actual costs especially for larger units may be 50% higher than what is shown in the table.

Rental housing stock in the region is also relatively older and more likely to need additional work prior to any replacement using a different energy source. Again using the AHS microdata, 63% of the region's rentals were built in 1979 or earlier compared to 57% of owner-occupied units. Overall, 83% of owner-occupied and 85% of rental units were built prior to increasing electricity demand in 2000[10] and beyond. While many units have been upgraded since being built, the overall age of the region's housing stock suggests the scale of further improvements that will be needed. Local rent control ordinances, by slowing the pace of capital improvement investments especially in Los Angeles County, likely add to this situation as well.

Figure 10: Year Structure Built

Source: AHS calculations

	Owner-Occupied	Rentals
1979 and earlier	57%	63%
1980 to 1999	26%	22%
2000 and later	17%	14%
Region	100%	100%

Using the factors shown in this section, the analysis presents two cost estimates based on the revised proposal: (1) cost of attaining the staff's proposed attainment schedule with an increasing share of non-NOx units over time and (2) the projected costs of the two proposed fees at their potential maximum level.

Cost of the Proposed Fees

The costs of the proposed revisions to the rules are less than the previous mandate contemplated for these unit, but they still pose a significant cost burden to households in the District. Combining Figures 3,7, 8, and 9, the estimated new housing component, and the proposed fees and target schedule results in average annual costs of $306 million ($2025). In order to determine the potential maximum level of these fees, the estimate covers replacement of NOx units only in cases

[9] BizFed, Decarbonization Presentation, SCAQMD Tour, October 4, 2024.

[10] After remaining relatively level, US Energy Information Administration data shows average household use began increasing in 1995 and continued growing through 2006. The AHS microdata, however, reports this data by decade in this time period rather than by year.

where subsidies cover the full incremental cost. Associated energy savings from those replacements would be negligible.

The total costs are equivalent to an average annual cost of $48 per household in the district, but the payment of these costs will vary by household. Between 2027 and 2040, simultaneous replacement of a furnace and water heater would increase household costs by between $1,450 to $1,750, or an average of $1,510 ($2025). Owners would pay these fee costs directly. Renters experience it as upward pressure on their rent. Compared against median household income estimated from the 2023 ACS 1-year microdata through IPUMS.org, the effective result of the new fees would be a 1% tax on owner households and a 2% tax on renter households, as shown in Figure 11.

Figure 11: Furnace/Water Heater Replacement as a Share of Median Income

Source: 2023 ACS accessed through IPUMS.org, calculations in text; $2023

	Median Household Income	Fee Costs	Percentage
Inland Empire			
Renter	$60,000	$1,443	2%
Owner	$100,700	$1,443	1%
LA-Santa Ana			
Renter	$67,000	$1,443	2%
Owner	$126,900	$1,443	1%
Total District			
Renter	$65,000	$1,443	2%
Owner	$118,000	$1,443	1%

The details of the analysis:

- The specifics of the fee revision are taken from the March 6 staff presentation. While the proposed fees differ from the District's previous manufacturer fees, they are an extension and in the case of the penalty component an expansion of fees that otherwise are scheduled to expire and are an added cost to housing in the District.

- While these fees have the potential to reimburse some households for their costs through proposed rebates, these subsidies to a few will be financed by fees that will raise costs for all, including potentially both to new compliant units and traditional gas-fired units sold within the District depending on how producers allocate these costs.

- The extent of the net effect is uncertain given that such subsidy programs tend to dissipate their potential reach due to administrative costs for collection, distribution, and tracking and other factors such as fraud. For example, a recent Congressional Research Service report[11] identified $247 billion in improper payments under 82 different loan, grant, credit, and other subsidy programs in the federal government in FY 2022.

- Such subsidies also tend to increase prices further, with sellers pricing to the subsidy as well as the market. For example, the rapid expansion of low-cost student loans is widely recognized as a major contributor to the equally rapid escalation in overall higher education costs. During the enactment process for the federal "Inflation Reduction" Act, electric vehicle producers tracked their announced price changes very closely to the changing level of the proposed vehicle tax credits as the bill progressed.

- Proposed levies on the producers by themselves will affect prices although the extent is frequently subject to debate. As an additional production/selling cost, sellers will seek to recover this item just as they would any other cost increase in their overall structure. The extent to which they will do so immediately or do over time will depend at any point on the overall market structure, whether they are in the role of a price taker or retain some ability to be a price setter. In this respect, however, the primary function of regulations like those being proposed is to shift this balance in their favor. By restricting the market or intervening in the market, regulatory actions restrict supplies and increase the price authority of those producers still willing to engage. California consumers have faced this situation repeatedly on many consumer and producer products due to state and local regulations including fuels, vehicles, landscape equipment, appliances, and other goods. More recently and broadly, regulatory restrictions during the pandemic severely restricted available supplies, leading to consumer and producer good shortages and resulting in a spike in inflation.

- Taking these factors into account, the total fee costs are based on the proposed fee schedule, with no potential adjustments in years sales are over the annual targets. The annual targets are taken as shown in the March 6 staff presentation. Total fee revenues available each year for subsidies are discounted by 20% to account for leakages due to administrative costs, fraud, and pricing to subsidies. The number of zero-NOx units in each year is assumed to be only those where the additional cost can be fully subsidized from available fee revenues, with consumers otherwise choosing lower-cost alternatives. This approach results in an estimate of the maximum level of fee revenues (assuming even distribution of all the factors) likely to result from the current proposal. The distribution among the subsidized unit types is based on the existing unit estimates by unit type.

Costs of Proposed Attainment Schedule

While the proposal no longer would require the sale of zero-NOx units, the proposed compliance schedule represents the cost alternative being used to impose the substantial new fees and represents a base against future regulatory amendments could be developed. The costs embedded in the proposed compliance schedule to NOx units in the District are calculated by combining Figures 3,7, 8, and 9 and the estimated new housing component. The associated fees imposed on NOx units consequently cover only the $50/$100 components, with the portion of revenues actually going to replacements netting out against the covered expenses and only the

[11] Congressional Research Service, Improper Payments: Ongoing Challenges and Recent Legislative Proposals, December 10, 2024.

portion covered by leakages (see below) adding to the net costs. The resulting total average annual costs to meet the proposed compliance schedule is $8.5 billion ($2023) in the period 2027-2040. This number incorporates average annual capital costs of $8.9 billion partially offset by $362 million in average annual energy savings and $3.8 million in fee costs.

Figure 12: Average Annual Costs, 2027-2040

Sources: see text, $2023 million

MSA	Tenure	Replacement Capital Costs	New Capital Costs	Annual Energy	Net Fees	Total
Inland Empire	Rent	$559.0	$83.9	-$26.0	$0.3	$617.2
	Own	1,412.0	219.2	-$69.5	0.7	1,562.4
	Commercial	20.2		-$0.9	0.0	19.3
	Total	$1,991.2	$303.1	-$96.4	$1.0	$2,198.9
LA-Orange	Rent	$2,993.2	$281.9	-$127.8	$1.4	$3,148.7
	Own	3,038.6	229.3	-$136.8	1.4	3,132.5
	Commercial	20.2	0.0	-$0.9	0.0	19.3
	Total	$6,052.0	$511.3	-$265.5	$2.8	$6,300.5
Total District	Rent	$3,552.2	$365.9	-$153.9	$1.7	$3,765.9
	Own	4,450.6	448.5	-$206.3	2.1	4,694.9
	Commercial	40.3		-$1.8	0.0	38.6
	Total	$8,043.1	$814.4	-$361.9	$3.8	$8,499.4

This result works out to the equivalent of an average annual cost of $1,300 per household in the District, but the distribution of those costs will vary widely by year. For example, an owner household facing replacement of both their furnace and water heater would face up to additional costs of $45,700 for single family detached, while a renter could see rent pressures coming from $38,300 for a multi-family unit.

Figure 13: Furnace/Water Heater Replacement as a Share of Median Income

Source: 2023 ACS accessed through IPUMS.org, calculations in text

	Median Household Income	Net Cost of Furnace & Water Heater Replacement	Percentage
Inland Empire			
Renter	$60,000	$38,300	64%
Owner	$100,700	$45,700	45%
LA-Santa Ana			
Renter	$67,000	$38,300	57%
Owner	$126,900	$45,700	36%
Total District			
Renter	$65,000	$38,300	59%
Owner	$118,000	$45,700	39%

While the potential cost pressure facing renters is nominally lower, the relative effect is much higher when considering income. Using median household incomes,[12] these figures translate into 59% of the median household income in 2023 for renters, and 39% for owners. The cost figures in

[12] From ACS 2023 1-year microdata analyzed through IPUMS.org.

Figure 12 are based on multi-family for renters and single-family for owners. And as indicated earlier, the costs for renters may be 50% higher depending on the age of their buildings.

For a broader demographic perspective, the incidence of the replacement costs (capital costs and energy savings) is estimated using the previous AHS demographic data. Households would face these costs both directly when they replace appliances and indirectly through additional upward pressure on rents.

By income level, households with incomes below $50,000 would experience the largest share of costs at about 30% in both MSAs and the District, but this share is only slightly above the equivalent for those with incomes between $100,000 and $200,000. By relative incidence—using an indicator formed by dividing the share of cost incidence by the underlying share of households—households at the highest income levels will see costs at about 60% higher relative to their housing share, while the other income levels show fewer differences.

This pattern by relative incidence reflects prior trends and views on home heating costs. For many years, electric heating was often associated with lower income households and was considered an additional cost burden due to the relatively higher cost and consequent more infrequent use compared to lower cost natural gas. Replacing the existing NOx units would complete the turnaround in this economic development assumption, by extending this alternative to almost all households in the District.

Figure 14: Incidence of Average Net Replacement Costs by Income & Tenure

Source: see text; average 2028-2040

MSA	Tenure	$50,000 & Below	$50,001 to $100,000	$100,001 to $200,000	$201,000 & Above	Total
Inland Empire	Rent	48%	30%	18%	5%	100%
	Own	25%	25%	33%	16%	100%
	Total	31%	26%	29%	13%	100%
LA-Orange	Rent	41%	30%	23%	7%	100%
	Own	20%	23%	33%	24%	100%
	Total	30%	26%	28%	16%	100%
Total District	Rent	42%	30%	22%	7%	100%
	Own	22%	24%	33%	21%	100%
	Total	30%	26%	28%	15%	100%

By ethnicity and race, Latinos and non-Latino Whites are likely to experience the highest incidence of the replacement costs at about the same level, but with Latinos subject more to rent pass-throughs and non-Latino Whites more from direct purchases of this equipment. Using the relative impact indicator, non-Latino Blacks are significantly more vulnerable to these costs, with non-Latino Black homeowners in the District facing potential costs 200% higher than their relative share of housing and renters in LA-Orange MSA at 21% higher. While Asian/PI households also face significantly higher cost impacts near these levels in the Inland Empire, their overall relative incidence in the District is only half their share of housing.

Figure 15: Incidence of Average Net Replacement Costs by Ethnicity/Race & Tenure

Source: see text; average 2028-2040

MSA	Tenure	Latino	White	Black	Asian/PI	Other	Total
Inland Empire	Rent	51%	28%	6%	13%	2%	100%
	Own	40%	42%	8%	8%	1%	100%
	Total	43%	38%	7%	10%	1%	100%
LA-Orange	Rent	45%	30%	13%	10%	2%	100%
	Own	30%	42%	23%	5%	1%	100%
	Total	37%	36%	18%	7%	1%	100%
Total District	Rent	46%	29%	12%	11%	2%	100%
	Own	33%	42%	18%	6%	1%	100%
	Total	39%	37%	15%	8%	1%	100%

There are no substantial differences by nativity. Except for minor differences, the distribution of costs largely follows the overall share of housing for each group.

Figure 16: Incidence of Average Net Replacement Costs by Nativity

Source: see text; average 2028-2040

MSA	Tenure	Native Born	Foreign Born, Not a Citizen	Foreign Born, Naturalized	Total
Inland Empire	Rent	69%	19%	12%	100%
	Own	73%	8%	18%	100%
	Total	72%	11%	17%	100%
LA-Orange	Rent	59%	24%	17%	100%
	Own	62%	9%	29%	100%
	Total	60%	16%	24%	100%
Total District	Rent	60%	23%	17%	100%
	Own	66%	9%	26%	100%
	Total	63%	15%	22%	100%

Economic & Fiscal Effects

The economic and fiscal effects of the proposed rules were evaluated through the following steps:

- Analysis is done through the IMPLAN[13] input/output model for California using 2023 input/output data. The core analysis region is composed of the four counties wholly or partially within the District.

- Inputs used are the average annual amounts from the following factors during the 2027-2040. The incremental fee cost and the incremental capital cost component net of energy savings in general are treated as the equivalent of a tax increase affecting household

[13] For more information on the IMPLAN modeling process, go to IMPLAN.com.

spending. Changes in energy costs are entered as output changes to the two affected industries.

- Changes to other industries may be possible but will be less significant and are not included in the analysis. Contracting services may increase depending on the complexity of the change-outs, but the majority of these costs will still be incurred regardless of whether the units being installed are gas-fired or electric. Margins for the affected retail and wholesale industries also are assumed to be a wash.

- Fees under the proposed amendments are assumed to be paid annually directly by homeowners and on a pass-through basis by renters through allowable rent increases.

- In assessing the potential effects of the proposed compliance schedule, the higher cost of the mandated replacements likely means most of these purchases would be financed. For homeowners, the annual capital costs are transformed into annual cash payments assuming 20% cash purchases and 80% financed at a real rate of 7% (based on a mix of the lower range of current rates for second mortgages and dealer financing, good credit score) over 5 years.

- The estimates for renters depend on a far greater number of factors. In an otherwise functioning market environment, the additional costs in essence would operate as a tax and shift the supply function to the left. Because supply is highly inelastic at the current range in the region, the result would be to shift most of this additional cost to renters. Demand in the region also is sticky, but in at least the intermediate period is subject to some fluctuation through renter response such as increased overcrowding above the region's already high rates, migration to lower cost regions and states, and in extreme circumstances additional homelessness. Generalized rent pressures can be calculated through a number of means, such as the loan payment approach used above and through more generalized cap rate approaches.

  Markets in the region, however, are not fully functioning. Recent state rent control limits allowable annual increases depending on the age of the property. Several localities especially in Los Angeles County have their own local ordinances. For example, the City of Los Angeles in addition to annual increase limits also restricts capital expenditure pass-throughs to only half the amount spread over 5 years. While these are regulatory limits, the actual effect again can differ. Landlords may respond to these limits by deferring other planned improvements, extending the period under which rent pass-throughs would be imposed. The remaining capital expense would also remain as a price pressure, leading landlords to impose the maximum allowable increases in future years.

  Taxes also play a role. These expenses currently may be subject to Section 179 expensing up to specified limits, and landlords could be expected to schedule replacements based on maximizing tax benefits. This provision may or may not be extended in the current federal tax legislation. The remainder that is not expensable is subject to MACRS depreciation over 27.5 years, with any undepreciated amounts recoverable in the certainty that any such equipment would subsequently be replaced again before the end of this period.

To simplify the calculations and present more of a worst case/conservative approach, the Los Angeles restrictions are applied. Half of the cost is allocated to households over a period of 5 years, with the remainder allocated to the rental industry. All energy savings are applied to households, although some leases incorporate utilities as being paid through the monthly rent.

- Commercial capital costs are similarly treated as price increases on households. The annual amount is estimated through a similar set of assumptions as for homeowners.

- The proposed fee costs are also treated as price increases on households, with the fees passed on to the price of the affected units.

Figure 17: Average Annual Economic Impacts, Fee Proposal, 2027-2040

Source: IMPLAN calculations, $2025 million

	Employment	Labor Compensation	Regional GDP	Sales
Direct	0	-$0.7	-$1.4	-$1.1
Indirect	0	-0.1	0.3	0.7
Induced	-1,800	-118.1	-231.4	-358.7
Total	-1,800	-$118.9	-$232.5	-$359.2

The results are shown in Figure 17. Including the impacts on the rest of California assessed through a multi-regional input/output (MIRO) approach, the fees under the revised regulation proposal would reduce jobs by 1,800, labor compensation (wages, salaries, and benefits) by $118.9 million, regional GDP by $232.5 million, and regional sales by $359.2 million. These are annual amounts based on the average annual costs during 2028-2040 and are shown in $2025.

Figure 18: Average Annual Fiscal Impacts, Replace All NOx Units, 2028-2040

Source: IMPLAN calculations, $2025 billion

	Local	State	Total
Direct	-$0.3	-$0.2	-$0.5
Indirect	0.1	0.0	0.1
Induced	-12.7	-14.8	-27.5
Total	-$12.9	-$15.0	-$27.9

The associated fiscal impacts are shown in Figure 18. Combined, the economic impacts would translate into annual local and state taxes being lower by $27.9 million.

While no longer mandated in the proposed amendments, meeting the compliance schedule shown in the latest draft would have substantially larger effects on the regional economy. Annual job losses would be 36,500, labor compensation lower by $2.5 billion, regional GDP lower by $6.2 billion, and sales down by $8.4 billion. Local and state revenues would be reduced by a total of $876 million annually.

Figure 19: Average Annual Economic Impacts, Compliance Schedule, 2027-2040

Source: IMPLAN calculations, $2025 million

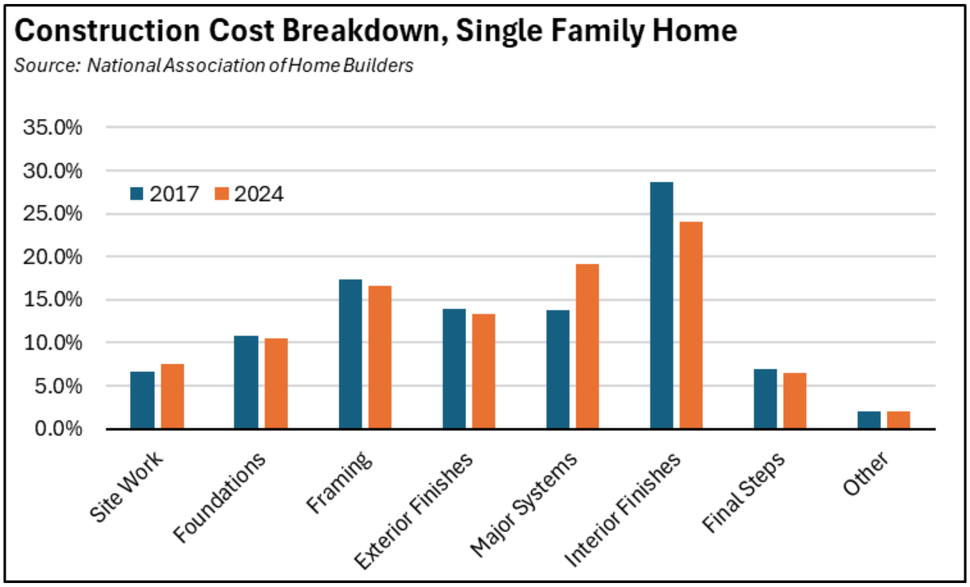
	Employment	Labor Compensation	Regional GDP	Sales
Direct	-3,900	-$0.3	-$2.1	-$2.1
Indirect	-1,600	-0.1	0.0	0.1
Induced	-31,000	-2.1	-4.1	-6.3
Total	-36,500	-$2.5	-$6.2	-$8.4

Figure 20: Average Annual Fiscal Impacts, Compliance Schedule, 2027-2040

Source: IMPLAN calculations, $2025 million

	Local	State	Total
Direct	-$222.8	-$199.0	-$421.8
Indirect	17.1	11.4	28.4
Induced	-222.3	-260.1	-482.4
Total	-$428.0	-$447.7	-$875.8

Housing Impacts



The proposed regulations add further cost pressures to the largest source behind increasing construction cost and consequently housing prices over the last 7 years. Based on national data from the annual National Association of Home Builders (NAHB) surveys, mechanical systems (plumbing, electricity, and HVAC) have risen from the 4th largest component at 13.8% of total construction costs in 2017 (when California's housing market recovered from the 2008 price shocks), to 2nd largest at 19.2% in the latest data for 2024. Overall, these systems accounted for 26% of the overall construction cost rise. The proposed regulations will increase them even further.

To put the proposed fees in another context, Figure 21 compares the average fees to median housing costs for households replacing both their furnace and water heater with gas units. Nothing else would change, only the additional fees that would have to be paid because the housing was within the District. As indicated, these fees amount to three-quarters of what renters paid in monthly housing costs in 2023, and just slightly less for homeowners.

Figure 21: Proposed Fees vs. Monthly Housing Costs, Replace Furnace & Water Heater

Source: ACS 2023 analyzed through IPUMS.org, previous calcs

	Monthly Housing Cost	Fee, Both Units	Percent
Rent	$1,948	$1,440	74%
Own	$2,214	$1,440	65%

Other Considerations

- Energy cost numbers are based on estimates and projections contained in the various source documents. However, natural gas prices are now expected to fall while electricity prices remain on a continuous rise. The recent projections from EIA[14] expect residential natural gas prices to fall 3.3% in real terms between 2024 and 2026 in the Pacific states.

- The energy prices used in the cited documents generally use average electricity rates. The state, however, is pushing time-of-use electricity prices as a conservation designed in part to cope with concerns over energy reliability engendered by the state's overall energy policies and building restrictions. This provision likely will push energy use more into the higher cost periods especially for households with two earners.

- Spillover effects on prices are not likely in most of the region as all or nearly all of housing in three of the counties will be subject to these rules. San Bernardino is the exception, with about a quarter of the housing lying outside the District's boundaries and is otherwise relatively isolated from other retail centers. This diminished market size combined with price increases coming from the mandated offerings in the District portion are likely to have at least some spillover effect on these households as well.

[14] US Energy Information Administration, Short Term Energy Outlook, February 25, 2025.

ABOUT THE AUTHOR

Michael Kahoe brings over 40 years of high-level public and private sector experience in developing objective data and analysis on a wide range of public policy initiatives and development proposals. With 15 years experience in California State government and additional service with local governments, he has an in-depth familiarity with the workings of State government, and a record of managing initiatives beginning with policy development and continuing through legislation, regulation, and administrative phases.

Michael's positions with the State include Deputy Cabinet Secretary in the Governor's Office, where he had overall responsibility the environmental, energy, agriculture, and business regulation programs. He also had responsibility for federal issues affecting those agencies, including state agency lobbying of Congress and federal agencies, service on numerous federal advisory committees, and California's participation in Western Governors' Association and Border Governors' Association. Prior to that, he was one of the key staff that created the California Environmental Protection Agency, subsequently serving as Deputy Secretary and Chief of Staff with responsibility over all legislation, regulation, and the Agency's policy and program initiatives. As Assistant Secretary of the former Environmental Affairs Agency, he had responsibility over the Agency's boards and permitting for major coastal and offshore developments.

After leaving state service, he has provided economic and policy consulting to a variety of public and private clients. This work currently includes serving as Policy Consultant to California Business Roundtable and its associated California Center for Jobs and the Economy. Previously, he held senior management positions with Bay Area consulting firms providing economic, permitting, and environmental services.

Michael has an MA in Economics from UC Santa Barbara, MBA in Finance from UC Berkeley, and BA in Social Relations from Immaculate Heart College.

South Coast Air Quality Management District

UPDATED NOTICE

Proposed Amended Rule 1111

Reduction of NOx Emissions from Natural Gas-Fired Furnaces

Proposed Amended Rule 1121

Reduction of NOx Emissions from Residential Type, Natural Gas-Fired Water Heaters

The South Coast Air Quality Management District (South Coast AQMD) has published an updated Notice of Public Hearing for June 6, 2025, when the Governing Board will consider the adoption of Proposed Amended Rule 1111 – Reduction of NOx Emissions from Natural Gas-Fired Furnaces (PAR 1111) and Proposed Amended Rule 1121 – Reduction of NOx Emissions from Residential Type, Natural Gas-Fired Water Heaters (PAR 1121). PAR 1111 and PAR 1121 have been revised to provide flexibility and consumer choice. This Notice of Public Hearing has been updated to reflect the deadline of June 3, 2025, for the June 6, 2025 Public Hearing on PAR 1111 and PAR 1121 regarding comment materials to the Clerk of the Board.

The Notice of Public Hearing is available online through the following link:

- Notice of Public Hearing - June 6, 2025 (subject to change)

For more information on PAR 1111 and PAR 1121, please visit the following links:

- Myths vs Facts - Understanding the Proposed Space and Water Heating Appliance Rules (1111/1121)
- Space and Water Heating Clearinghouse Webpage

For more information, please contact:

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For more information, please visit the 1111 and 1121 Proposed Rules Page.

Americans with Disabilities Act and Language Accessibility

Disability and language-related accommodations can be requested to allow participation in the Governing Board meeting. The agenda will be made available, upon request, in appropriate alternative formats to assist persons with a disability (Gov. Code Section 54954.2(a)). In addition, other documents may be requested in alternative formats and languages. Any disability or language-related accommodation must be requested as soon as practicable. Requests will be accommodated unless providing the accommodation would result in a fundamental alteration or undue burden to the South Coast AQMD. Requests can be sent to the Clerk of the Boards, South Coast AQMD, 21865 Copley Drive, Diamond Bar, CA, 91765-4178, at (909) 396-2500 (for TTY, 909-396-3560) from 7:00 a.m. to 5:30 p.m., Tuesday through Friday, or send the request to cob@aqmd.gov.