



THE UNEQUAL BURDEN OF DATA CENTERS

An Examination of the Environmental
and Public Health Impacts on
Communities in California



EXECUTIVE SUMMARY

The rapid growth of generative artificial intelligence (AI) has prompted Big Tech to accelerate its investments into and construction of facilities to support AI infrastructure that requires high-performance computing power and data storage. This surge is raising critical concerns among researchers, advocates, and policymakers about the environmental and public health impacts of data centers, especially amongst the most marginalized communities.

Our report highlights the disproportionate location of data centers in communities in California that already face unhealthy air quality, groundwater threats, and the presence of hazardous waste, as well as the environmental and health risks that expanding AI infrastructure poses to communities across the state. We also present three case studies of communities of color that face high pollution and asthma rates, hosting data centers. These cases highlight the lack of accountability from data centers that claim sustainability when exempting their locations from Environmental, Social, and Governance (ESG) frameworks. The locations of these data centers reveal a troubling trend about whose health is disproportionately being impacted in the race for global AI dominance. Additionally, we propose local and state policy recommendations aimed at promoting responsible data center development.

Key Research Questions

- What relationships exist between data center locations and the environmental and health patterns of communities across California?
- Are existing ESG goals at data center companies sufficiently accounting for community impact at data center locations in California?

Methodology

- To assess the extent to which data centers are disproportionately located in overburdened Californian communities, a spatial analysis was conducted to compare the state's data center locations by community air quality, groundwater quality, and presence of hazardous waste.
- To contextualize the state-level analyses at a localized community level, we investigated three data center sites: Bayview-Hunter's Point (San Francisco), Del Paso Heights (Sacramento), and Hawthorne (Los Angeles). We identified majority-minority communities with high pollution burden and asthma rates that are colocated with data centers, highlighting the potential for further data center development to exacerbate existing environmental and health burdens across the state.
- The case studies were further used to examine the strength and accuracy of the sustainability claims made by the data centers planned and operating in these communities, and to evaluate how these companies with public ESG goals have addressed their impacts on the overburdened communities in which they are located.

Key Findings

- California has a high proportion of the nation's data centers, and the location of existing centers presents a pattern of being disproportionately sited in communities that already face unhealthy air quality, groundwater threats, and the presence of hazardous waste.
 - **Unhealthy air quality:** 82% of data centers in California are located in communities with poor air quality.
 - **Groundwater threatened areas:** 65% of data centers are in areas facing the highest groundwater threat levels.
 - **Hazardous waste areas:** 79% of data centers in California are located in the top 20th percentile for hazardous waste levels.
- In Bayview-Hunter's Point (San Francisco), Del Paso Heights (Sacramento), and Hawthorne (Los Angeles), data centers are colocated in majority-minority communities with high rates of pollution (CES scores) and asthma.
- Among data centers located in communities already facing environmental and health hazards, the companies themselves often exempt location considerations from their ESG frameworks, create greenwashing¹ narratives, and have limited accountability for harms to public and environmental health.

¹Greenwashing describes intentional corporate tactics used to mislead the public about a company's sustainability goals by presenting deceptive environmental claims that are inconsistent with the company's actual practices.



State- and Municipal-Level Policy Recommendations

- 1 Prohibit data center development on contaminated and environmentally overburdened sites and modernize zoning ordinances.
 - **Prohibit land use** at the state-level on Superfund sites for data centers.
 - **Update outdated zoning ordinances** at the local-level to prevent data centers from being sited in overburdened communities.

- 2 Strengthen government capacity for air quality monitoring and enforcement.
 - **Invest in proactive monitoring and enforcement** to ensure accurate reporting, while holding data center developers and AI companies accountable for potential community harm.

- 3 Require that data centers' utility usage and environmental impact data be publicly accessible.
 - **Require that information on data center water consumption, energy usage, pollution emissions from standby generators, and contaminant discharge be publicly accessible** to government officials and residents alike.
 - Require proposed data centers to **disclose 90 days in advance of their expected water and power use** so that community-based organizations (CBOs) and local governments are fully apprised.

- 4 Require data center developers to develop and implement community benefit agreements (CBAs).
 - **Require the development and implementation of CBAs** to enable coalitions and organizations to negotiate with legally binding power, enhancing transparency and clarifying the projected impacts of a data center project on a neighborhood.

INTRODUCTION

As generative artificial intelligence (AI) adoption is projected to rapidly increase, Big Tech will spend nearly [\\$400B on AI capital expenditures this year, primarily expanding the hardware infrastructure powering these new innovations: data centers](#). With a large concentration of high-tech companies located in the United States, the country is a global leader in data center development, hosting approximately [30% of the world's data centers](#), with large-scale expansion planned and in progress. This surge—driven by the [federal government](#), Big Tech, and data center companies—raises concerns about the significant [strain on local and state energy resources, rising utility costs, environmental consequences as renewable energy is sidelined for air-and water-polluting fossil fuels, and threats to public health](#). To counter these concerns, Big Tech and the data center industry [emphasize](#) economic and investment opportunities, such as job creation, and argue that scaling AI will ultimately [accelerate climate action](#). However, the likelihood of these benefits materializing is being [challenged](#), and communities hosting data centers are [voicing concerns](#) about data centers' impact on public health.

In Memphis, Tennessee, Elon Musk's xAI data center was found in [violation](#) of the Clean Air Act and the Shelby County Local Implementation Plan by operating 35 unpermitted gas turbines, located a few miles from a community where [90% of residents are Black and the median household income is \\$36,000](#). This operation—as well as the Shelby County Health Department's [complicity](#) in issuing xAI an air permit—opens the door for more hyperscale data center development, which [typically requires](#) more than 100 megawatt (MW) of power. Merely six miles from xAI's center, Google is [investing](#) in a \$4B data center campus.

In Colleton County, South Carolina, which is home to a large proportion of Black residents, the passage of the [Energy Security Act](#) has paved the way for a potential [2,200 MW natural gas power plant](#) at the [site of a coal plant that the community worked to close down due to its role in poor health outcomes](#).

To the south of Dallas, Texas, [all six proposed data center projects](#) (as of the report's publication) are located in or bordering [majority](#) Black and Latine communities, totaling over a gigawatt (GW) of power.

These examples indicate an emerging and troubling national trend where Big Tech and data center developers are choosing vulnerable communities (i.e., [historically marginalized and working-class](#)) as sacrifice zones² for data center locations.

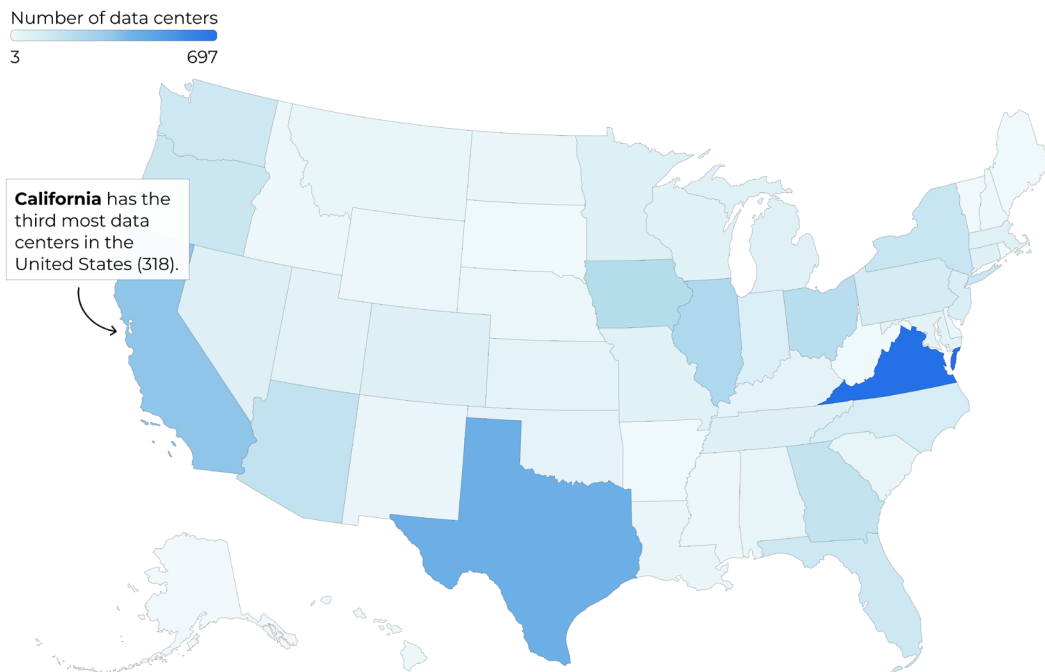
²In "[The People Say No: Resisting Data Centers in the South](#)," MediaJustice defines "sacrifice zones" as "geographic areas that poison local communities due to environmental degradation from industrial pollution and systemic economic divestment. These are areas where the rates of cancer caused by air pollution exceed the US government's own limit of 'acceptable risk.'"

A typical [AI-focused hyperscaler annually consumes as much electricity as 100,000 households](#). In Santa Clara, California, 50+ data centers collectively consume [more than half of the city's energy](#). PG&E, Northern California's largest utility provider, recently reported a [40% increase](#) in requests for data center power supplies.

The development of data centers in California evokes similar questions about whether infrastructure expansion creates sacrifice zones during site selection. The state's technology sector generates over \$500B in economic output and hosts [32 of the top 50 AI companies worldwide](#). California is also [one of the leading states in hosting data center infrastructure](#), with approximately 300 operational and planned data centers (Figure 1). In July 2025, the California Public Utilities Commission voted to [reduce regulatory hurdles](#) for further expansion of data center development.

Despite passing some of the nation's most progressive environmental protection policies, California has yet to enact legislation mandating greater data center transparency in energy and water consumption. With the environmental hazards posed by data center development only beginning to be exposed, Californians in these host communities face potential public health risks, especially for those already overburdened by existing socioeconomic and racial disparities, over-industrialization, limited healthcare access, and systemic disinvestment.

Figure 1. Number of data centers by state



Source: [Data Center Map](#)

To understand how data center placement may compound existing public health harms, we conducted a spatial analysis to compare California data center locations in the [Data Center Map](#) with the state's environmental health mapping tool ([CalEnviroScreen 4.0](#)). Then, to examine the importance of location as a necessary indicator in an equitable technology infrastructure framework and community impact analysis, we identified three majority-minority communities that have high pollution and asthma rates in California that are currently facing the potential exacerbation of community health burdens due to the development of mid-size (20+ MW capacity) data centers: Bayview-Hunter's Point (San Francisco), Del Paso Heights (Sacramento), and Hawthorne (Los Angeles County). We propose a set of policy recommendations that highlights the need for transparency, accountability, and stronger regulations to protect overburdened communities from the growing environmental and public health concerns posed by data center placement.

FINDINGS

California data centers are concentrated in communities already facing public health burdens

As technology companies and data centers expand their operations and propose new infrastructure, overburdened communities in California face heightened risks. Specifically, our analyses indicate a strong correlation between California data centers located in areas with high levels of diesel particulate matter (diesel PM), hazardous waste, and threatened groundwater. While these data do not prove a current causal relationship, they suggest that data centers are clustered in areas with poor environmental and health outcomes.

Finding 1: California data centers are disproportionately sited in communities with unhealthy air quality

Most data centers depend on diesel backup generators to [provide](#) emergency power during outages. Exhaust from diesel generators is linked to [significant public health risks](#) and estimated to be responsible [for up to 4M premature deaths worldwide each year](#). In California, [diesel pollution levels are already high](#), and diesel emissions are [estimated to be responsible for about 70% of California's known cancer risk from toxic air contaminants](#), with low-income communities and communities of color [experiencing greater exposure](#). According to a 2024 California Public Utilities Commission [report](#), the Bay Area Air Quality Management District (BAAQMD)³ estimates that nearly 90% of back-up generators are diesel-fueled.

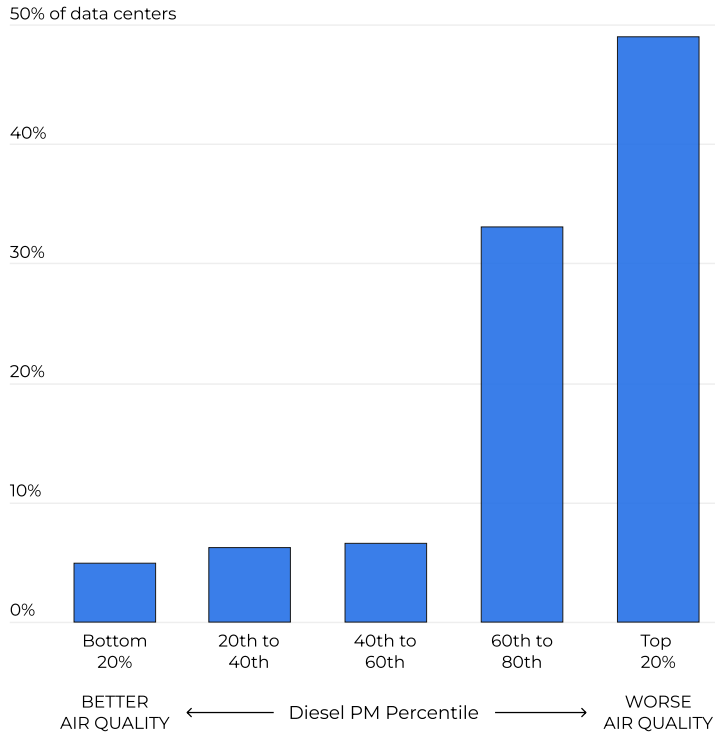
Our analysis of data center locations by community air quality index indicates that data centers in California are disproportionately located in areas most polluted by diesel PM. **A combined 82% of data centers are located in communities with poor air quality in California**, as measured by diesel PM levels (Figure 2). With exposure to the chemicals found in diesel PM, individuals are at risk for [long-term cardiovascular, cardiopulmonary, and respiratory illnesses](#). Additionally, even short-term exposure to nitrogen oxide (NO_x), a product of diesel generators, can [trigger and exacerbate asthma](#).

³This regional government agency was established in 1955 through state legislation and is responsible for monitoring air quality.

The pollutant emissions from [data centers could contribute](#) to over one-third of asthma deaths by 2030, with overall public health costs exceeding \$20B.

Figure 2. California data centers are clustered in areas with poor air quality

Data center distribution in each diesel PM quintile



Despite the documented harms that diesel generators can impose on host communities, Big Tech has lobbied to [restrict environmental reviews for its hyperscale data center generators](#). The accuracy of Big Tech's self-reported data center emissions is [facing increasing scrutiny](#), as few states require transparency regarding diesel generators, energy, and power usage.

Further, the data center industry is taking advantage of California's [Small Power Plant Exemption Rule](#), which allows the California Energy Commission to exempt power plants from its licensing authority if they do not exceed 100 MW. For instance, this rule has [enabled](#) 11 of the 13 largest data centers in Silicon Valley to be constructed near residential areas, as seen in a recent [proposed project](#) that includes two 99 MW data centers in downtown San Jose with [39 diesel generators](#). Without stronger regulation and oversight, overburdened communities in California are susceptible to disproportionate health risks from diesel PM exposure.

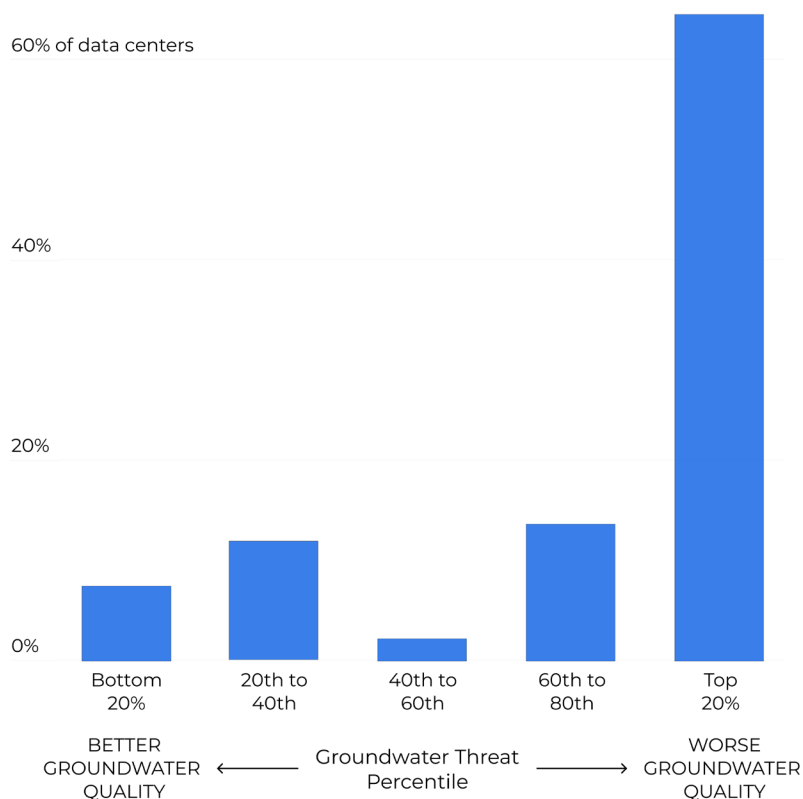
Finding 2: California data centers are disproportionately sited in groundwater-threatened communities

Data centers require large amounts of fresh water to produce electricity and cool their servers and routers. Because data centers also require low-humidity environments to protect the servers, they are often found in drought-prone regions already [battling water stress](#) (i.e., shortages due to inadequate supply). Further, this placement has the potential to [contaminate groundwater \(including drinking water supply\) and soil](#) in [host locations](#) and surrounding communities due to the elevated risk of leakage from the storage of hazardous chemicals at these data centers.

In 2023, data centers consumed [17B gallons of water](#), which is equivalent to the water usage of approximately [431,000 Californians in a year](#).

According to our analysis of data center locations relative to existing indicators of community groundwater quality, **nearly two-thirds (65%) of data centers in California are located in areas with the worst groundwater quality** (Figure 3). Similar to patterns of data center placement in areas already facing challenges from diesel PM, data centers are more densely concentrated in California communities that are prone to poor groundwater quality.

Figure 3. California data centers are clustered in areas with worse groundwater quality
Data center distribution in each groundwater threat quintile



“If the wars of this century were fought over oil, the wars of the next century will be fought over water, unless we change our approach to managing this precious and vital resource.”
– Former World Bank Vice President Islamil Serageldin, 1995

Given the risks to fresh water, a concerning gap remains, as only [half of data center companies](#) currently track water usage data. California is one of five states that [account](#) for 72% of the new centers built in high water stress areas. From 2019 to 2023, on-site water consumption in California data centers [increased by 113%](#), indicating that in regions with already precarious groundwater quality and limited drinking water, large hyperscalers or data center colocation facilities could further exacerbate the availability of fresh water, leading to significant downstream health and environmental impacts. For example, a recent study [linked the extraction of groundwater to rising sea levels](#), posing a significant risk to food production. Efforts to mitigate water loss, such as adopting closed-loop water systems⁴, have [been challenged](#). This poses a substantial danger for drought-prone regions like California, which faces an [increasing threat](#) of large-scale wildfires.



⁴Evaporative cooling water systems are generally more energy-efficient than [common](#) chilled water systems. However, evaporative cooling systems still consume significant amounts of water, as some is lost through evaporation. In contrast, closed-loop water systems conserve more water than traditional methods, but [require more](#) energy to operate, highlighting the tension between prioritizing water and energy conservation.

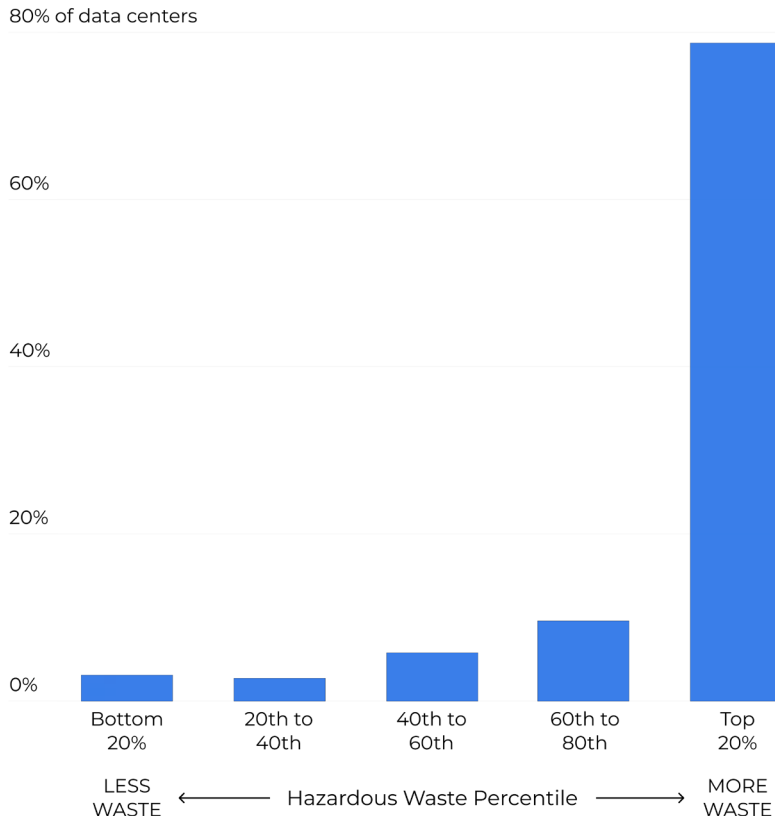
Finding 3: California data centers are disproportionately sited in communities containing high concentrations of hazardous waste

Data centers also generate [hazardous waste](#) in the form of electronic waste (e-waste), releasing chemicals from batteries and refrigerants in their hardware. E-waste—[considered hazardous](#) because it [contains](#) toxic chemicals that can [pollute](#) soil and water and that have been linked to serious health problems—is the fastest-growing type of solid waste worldwide and, often, an overlooked environmental impact of data center development. Studies have [associated hazardous waste with diabetes, cardiovascular disease, respiratory damage, and cancer](#).

Computational materials used to develop generative AI globally [could generate](#) up to 5M tons of e-waste between 2020 and 2030, approximately [a thousand times more e-waste than was produced in 2023](#).

Our findings indicate that California data centers are disproportionately sited in areas that already contain the greatest amount of hazardous waste, which have often been [in communities of color](#). **Seventy-nine percent of data centers in California are located in areas most polluted by hazardous waste** (Figure 4), which jeopardize not only the host communities but also the surrounding areas.

Figure 4. California data centers are clustered in areas with more hazardous waste
Data center distribution in each hazardous waste quintile



CASE STUDIES

To illustrate how these statewide patterns present in communities across California, the next section profiles three historically overburdened communities facing heightened risks from data center development. Big Tech and the data center industry continue to promote ESG priorities while simultaneously building in already overburdened Californian communities, creating a significant contradiction with “sustainable” AI development and contributing to longstanding patterns of corporate greenwashing.

These case studies challenge the narrative that data center developers’ current ESG and sustainability claims are sufficient, especially given that location-specific considerations are exempt from public ESG and sustainability evaluations.⁵

Bayview-Hunters Point, San Francisco

The [majority](#) of Black, Hispanic, and Asian American Pacific Islander communities in Bayview-Hunters Point (BVHP), San Francisco, have been negatively impacted by historic [redlining policies](#). While its Black population has plummeted from its historic high of 72% in 1980 due to [gentrification](#), its residents primarily identify as people of color. Residents of BVHP continue to face disproportionate environmental and economic burdens due to [rising housing costs](#), [inadequate public transportation options](#), and [brownfield sites](#).⁷ The ongoing industrialization and pollution of the area place a heavy burden on community health, and BVHP remains one of the most contaminated areas in California.

CES scores in BVHP range between the 75th and 92nd percentiles, meaning that some neighborhoods in BVHP have pollution that is worse than 92% of other neighborhoods in California (Figure 5). This cumulative contamination has resulted in [reduced life expectancies](#), [high mortality rates from lung disease](#), and some of the [highest rates of asthma](#)-related hospitalizations in San Francisco. In BVHP, emergency department visits for asthma are higher than 96% of other neighborhoods in California (Figure 6).

⁵All data centers in the following case studies did not respond to a request for comment

⁶ The [CalEnviroScreen \(CES\) score](#) and asthma levels were used to measure the communities’ existing vulnerabilities. The CES score takes into account a community’s pollution burden — including diesel PM emissions, groundwater threats, and hazardous waste — and population characteristics to measure the cumulative impact of pollution on vulnerable populations. Asthma was chosen as the primary health indicator, given that there is a direct linkage between data center backup generators, which emit harmful PM_{2.5} and NO_x, which worsen respiratory conditions like asthma.

⁷As defined by the Environmental Protection Agency’s (EPA) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (1980), a brownfield site is “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”

Figure 5. CES scores in BVHP are higher compared to other parts of San Francisco
Census tracts by CES score quintile

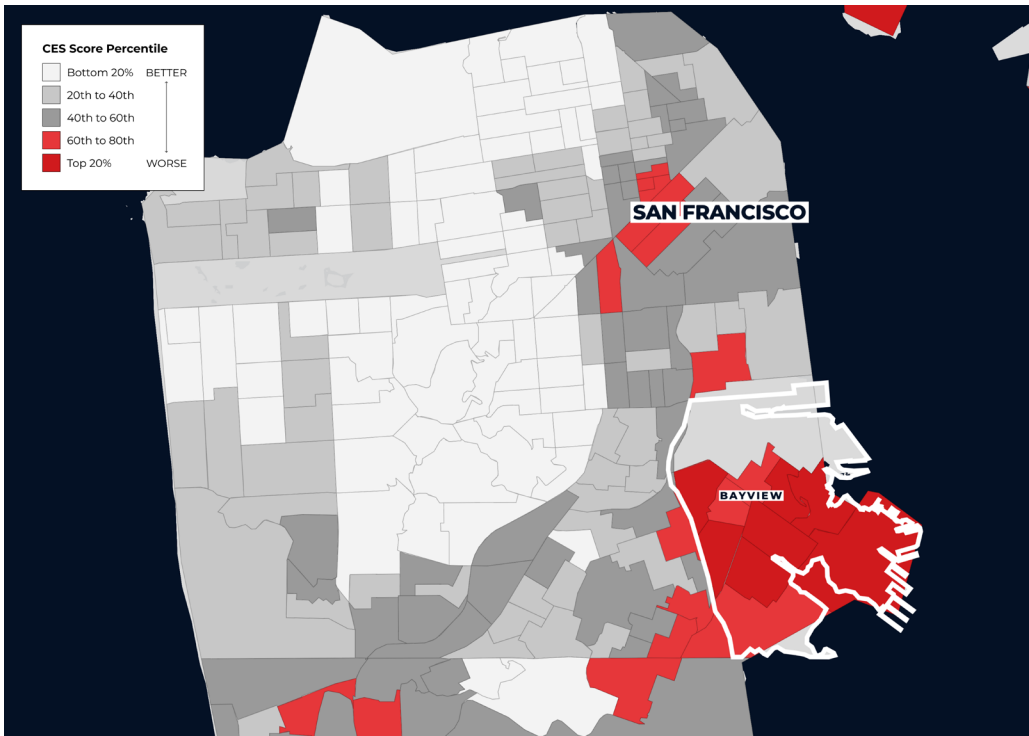
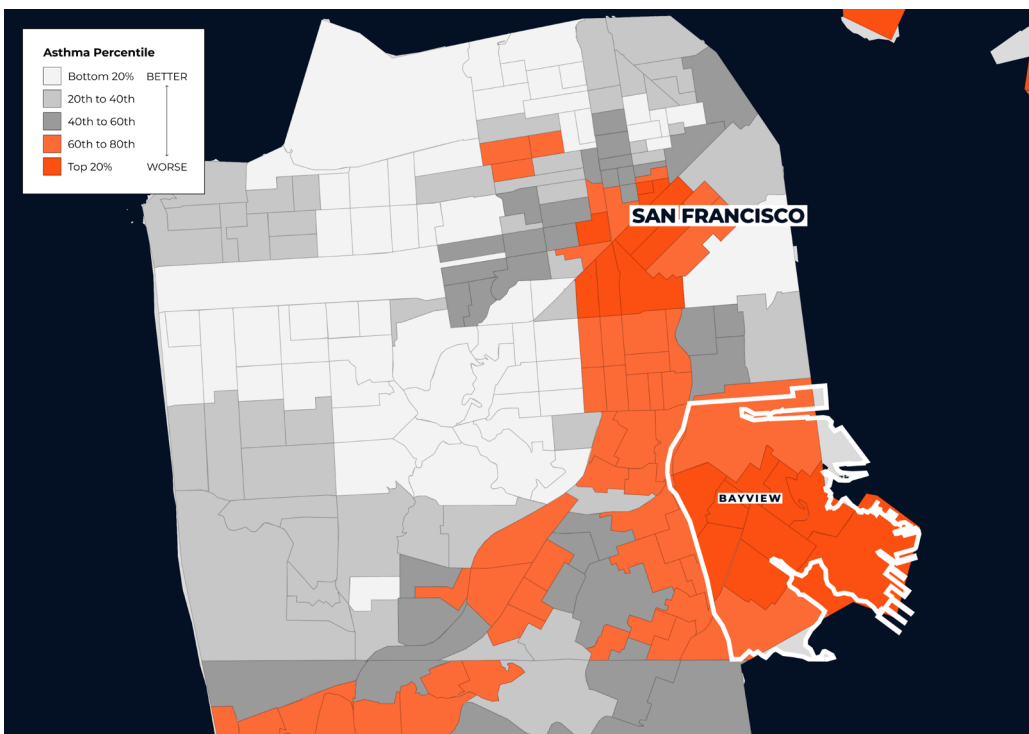


Figure 6. BVHP has among the highest rates of asthma in California
Census tracts by asthma quintile





BVHP now risks exacerbating these ongoing issues stemming from industrialization and [environmental racism](#) by hosting two data centers (one in existence and one planned for Summer 2026; Figure 7). Current zoning and permitting laws fail to adequately protect its residents. Both data centers are [zoned](#) as a production, distribution, and repair (PDR-2) area, which the city [claims](#) is often incompatible with residential areas due to noise emissions, 24-hour operation, and odor. Yet, they remain adjacent to a residential area (Figure 8).

Figure 7. Data centers in BVHP



Figure 8. Novva and Digital Realty data centers in BVHP are situated on the border between the PD2-R industrial zone and residential neighborhoods



Despite commitments to sustainable development and centering communities, the long-term impact of these data centers on the community’s environmental and public health is largely unknown. In the case of Digital Realty’s large 482,000 ft² colocated data center, with estimates up to [45 MW of total power](#), the company created a community engagement program to assess local environmental impacts during site development and has several initiatives to “[create local jobs, reuse brownfield sites, or ease pressure on public infrastructure](#).” However, according to a community leader⁸, residents across the street from the data center have complained about being woken up late at night by Digital Realty’s backup generators turning on and filling the air with a gasoline smell. Additionally, the BAAQMD has confirmed that not all the engines have a diesel particulate filter for diesel PM control.⁹

Novva has [invested](#) \$500M to build a [36 MW](#) data center adjacent to Digital Realty, with the first 9 MW set to launch in summer 2026. Novva [claims](#) that it is “the greenest data center ever created in the area,” citing its [use](#) of hydrotreated vegetable oil (HVO) as generator biofuel and a [waterless cooling system](#). Novva also [hopes](#) to achieve “genuine sustainability in data center operations without ‘greenwashing.’” However, HVO is not an emission-free diesel alternative for data centers, as it only [reduces emissions](#) and has been [linked](#) to tropical deforestation.

⁸The Kapor Governance team reached out to a community leader in BVHP to learn more about the impact of the Novva and Digital Realty data centers. They agreed to an informal interview to discuss the impact of the data centers on the community and legacies of environmental racism.

⁹This statement was confirmed during a meeting between the Kapor Governance Team and members of the BAAQMD in August 2025.

Both Digital Realty and Novva's definitions and sustainability metrics are insufficient, especially given their placement in an overburdened community, as their metrics fail to account for the long-term environmental and public health impacts on residents.

"The noise is very, very disruptive. And in particular, San Francisco has a noise curfew of 10 p.m., and sometimes the tests are overnight and disruptive... when they have all [the generators] going—which means you know there is some air pollution—since no one is actually monitoring [the air pollution]."
– Community Leader in Bayview Hunters-Point

Del Paso Heights, Sacramento

A data center's physical location does not exist in a vacuum—adjacent communities will inevitably be affected by potential [risks](#) to the environment and its residents to its downstream public health impacts. This further emphasizes why location must remain central to the regulatory efforts for data center development.

Del Paso Heights was a part of Sacramento's Second Redlining Phase, which [shifted](#) the majority of downtown Sacramento's low-income African American and Latine residents into the area through intentional, racist public housing policy and urban planning. The denial of capital has [perpetuated stark inequalities](#), leading to devastating public health impacts that are still felt today.

CES scores in Del Paso Heights and its surrounding neighborhoods range between the 84th and 94th percentiles, placing the most polluted portions of the community in the top 6% of the most polluted areas in the state (Figure 9). Asthma rates in Del Paso Heights are even higher than in BVHP, with one census tract at the 100th percentile—the highest across the state (Figure 10). Del Paso Heights is also [considered](#) an "urban heat island," and recent initiatives have begun to [recognize](#) Del Paso Heights as an area that lacks sufficient air monitoring data and infrastructure.



Figure 9. CES scores are higher in Del Paso Heights compared to other parts of Sacramento

Census tracts by CES score quintile

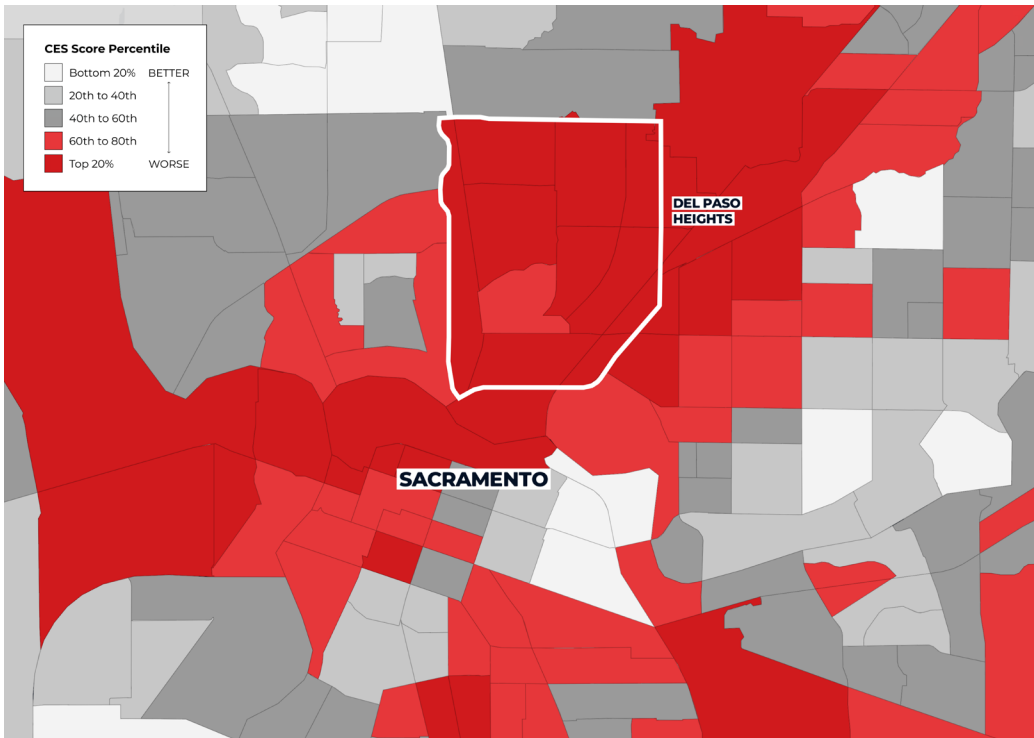
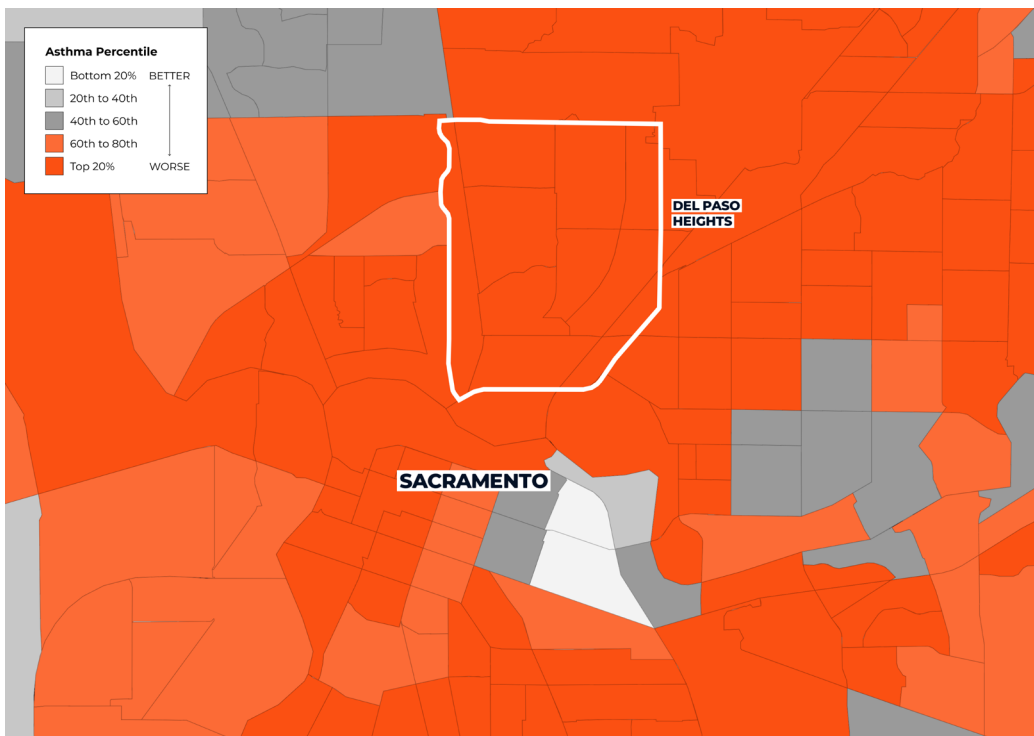


Figure 10. Del Paso Heights has among the highest rates of asthma in California

Census tracts by asthma quintile



Within a few miles of Del Paso Heights, there are two data center campuses. The first, NTT—a global telecommunications company that [serves](#) 75% of Fortune Global 100 companies—hosts a data center campus totaling 52.7 MW and spanning 266,000 ft² across three buildings (Figure 11).

In their [2024 Sustainability Report](#), NTT Global Data Centers has made considerable strides in terms of transparency, publishing both their water withdrawal and consumption data, as well as their greenhouse gas emissions data. However, in their [2025 Sustainability Report](#), NTT omitted a specific disclosure of volumetric water consumption. Additionally, despite [claims](#) to offer 100% green energy and a pilot HVO biofuel program to reduce emissions, NTT offers little information about the actual emissions, specifically from their Sacramento campus, and the potential cumulative health impacts associated with those emissions. Susceptibility to climate change has also influenced NTT’s operations. When NTT data centers became [vulnerable to weather risks](#) during California’s severe heatwave in 2022, the strain on the electricity grid prompted [a request](#) to run diesel generators at full capacity, bypassing air quality and other permit limitations.

The second data center campus is Prime Data Centers, which spans 215,000 ft² and has 26 MW capacity. The company plans to expand its data center presence in Sacramento, with application approval plans [underway](#) with Sacramento County. Prime Data Centers [claims](#) that it “aims to be a force for good in the communities where [they] operate, with contributions that extend beyond economic benefits, like tax revenue and job creation” and that “[\[f\]rom employees to customers and local communities, we work to build positive, lasting relationships that benefit everyone we engage with.](#)” However, information on *how* Prime collaborates with the surrounding residents and communities and the health and environmental indicators they are monitoring in the community is not publicly disclosed or acknowledged in their [sustainability plan](#). And while Prime Data Centers has [committed](#) to 100% renewable energy by 2030 and [ceased](#) purchasing traditional diesel oil for their backup generators, the data center company continues to use diesel supply in the meantime.

Figure 11. Data centers near Del Paso Heights

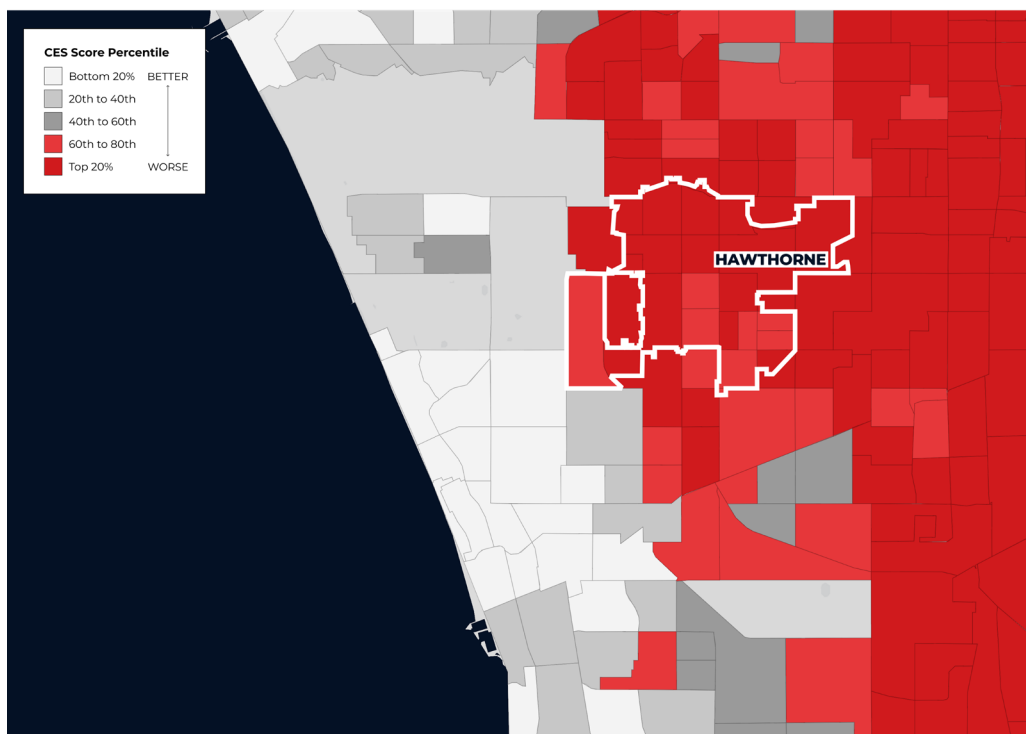


Hawthorne, Los Angeles County

Los Angeles has [become](#) a highly sought-after data center market, with [cheap electricity rates](#) attracting data center developers. Within downtown LA, [high-rise buildings have been fully converted into data centers](#). Hawthorne, a city within LA County and once a “sundown town”¹⁰, hosts one of the largest data centers in the county and has some of the [worst rates of racial disparity among Californian cities](#), reflecting the ongoing legacy of racial inequality due to redlining and disinvestment. Forty-six percent of the residents live below the 200% Federal Poverty Line (FPL), with [higher lung cancer and cardiovascular disease deaths, percentage of children with diagnosed asthma, and percentage of low birth weight births when compared to the average in LA County](#).

This difference is particularly stark when comparing Hawthorne’s CES scores and asthma rates with those of nearby coastal cities. The highest CES score in Hawthorne is in the 95th percentile, worse than 95% of other areas in California (Figure 12). Similarly, emergency department visits for asthma are as high as the 84th percentile, exceeding the rate in 84% of other neighborhoods in California (Figure 13).

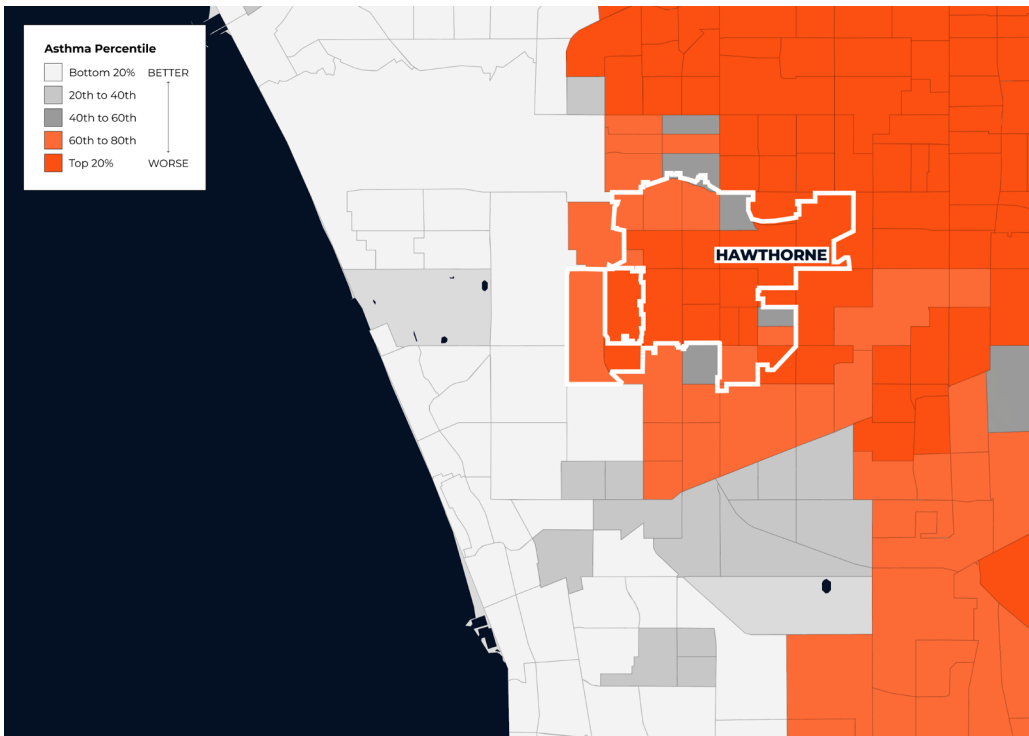
Figure 12. CES scores in Hawthorne are among the highest in California.
Census tracts by CES score quintile



¹⁰ A “sundown town” was an official or unofficial ordinance that threatened or excluded African Americans from a municipality, typically after dark.

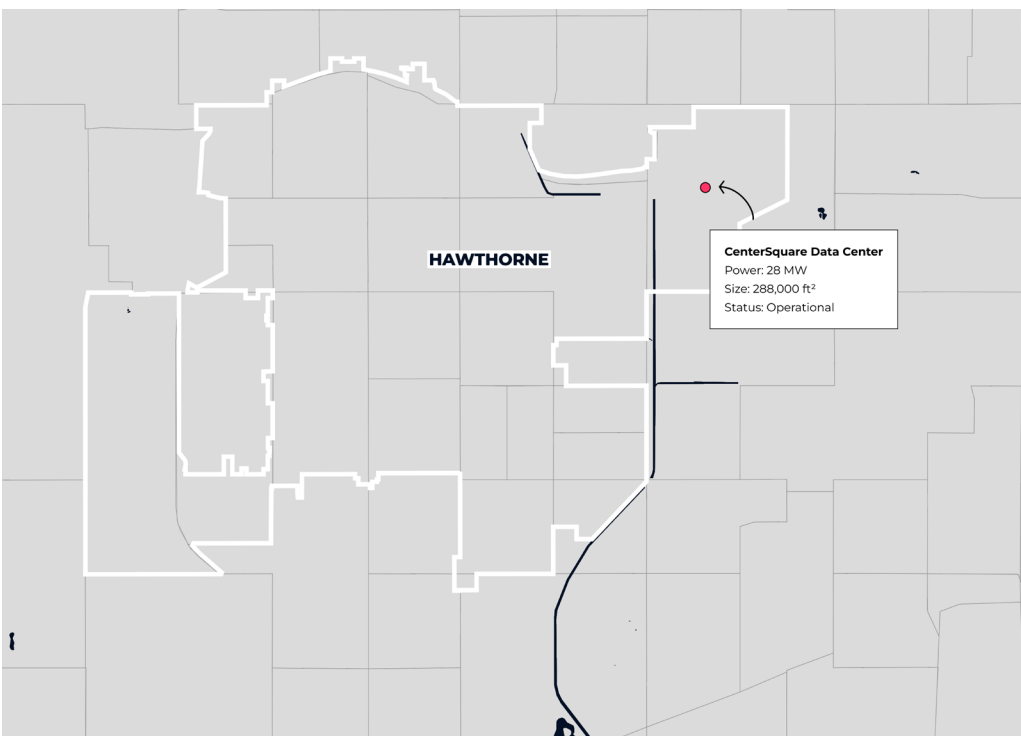
Figure 13. Hawthorne has high rates of asthma, especially compared to nearby coastal cities.

Census tracts by asthma quintile



Despite the strikingly disparate environmental and health outcomes, Hawthorne hosts a 28 MW data center, situated between a highway and a residential area (Figure 14). The 288,000 ft² [CenterSquare facility](#) is one of the larger data centers in LA.

Figure 14. Data center in Hawthorne



Centersquare [says](#) that sustainability is a top priority and describes their ESG mantra as “[ambitious, calculable, and transparent to align with a strategy that is impactful and actionable.](#)” Centersquare has set forth goals to achieve net-zero emissions by 2040 and to reduce direct and indirect emissions from operations by 50%, including diesel emissions from backup generators. Additionally, Centersquare has [partnered](#) with climate organizations and government agencies to expand its sustainability portfolio and education capacities.

Centersquare’s sustainability and ESG initiatives neglect to acknowledge and define their position concerning the environmental, economic, and health implications for Hawthorne. The company also overlooks quantifying the disproportionate emissions impact of their ongoing energy consumption and diesel emissions on the already vulnerable health of the community. The methods and indicators for monitoring the long and short-term health effects of the data center on Hawthorne residents have not been publicly identified, nor has a specific implementation process been provided to prioritize monitoring in already health-stressed areas.

Data center development is not location-neutral. Excluding location from sustainability frameworks and decision-making harms already vulnerable communities like BVHP, Del Paso Heights, and Hawthorne. Moving forward, regulatory actions aimed at promoting responsible data center development must address location-specific challenges.

STATE- AND MUNICIPAL-LEVEL POLICY RECOMMENDATIONS

- 1 Prohibit data center development on contaminated and environmentally overburdened sites and modernize zoning ordinances.
- 2 Strengthen government capacity for air quality monitoring and enforcement.
- 3 Require that data centers’ utility usage and environmental impact data be publicly accessible.
- 4 Require data center developers to develop and implement community benefit agreements.

State and local governments must take the lead in crafting a policy framework that addresses multiple aspects of systemic inequities, as the current federal administration [relegates its responsibilities](#) to keep communities and the environment safe from [advancements in AI development](#). **The following recommendations are not intended to be a one-size-fits-all approach, but rather serve as options that can be pursued to varying degrees, that contribute to a foundational framework for AI infrastructure governance.**

1. Prohibit data center development on contaminated and environmentally overburdened sites and modernize zoning ordinances



Policies that incentivize data center development in overburdened areas risk exacerbating [adverse health impacts](#) in vulnerable communities—primarily populated by people of color and low-income residents—and must be eliminated. The tech industry has a [long-standing history of contributing to the pollution burden](#) in the state, which is currently the host of the [second-highest number of Superfund sites](#).¹¹ The federal [push](#) for data center development in Superfund sites, while cutting funding¹² for cleanup, presents a precarious policy decision that has the potential to exacerbate environmental and public health harms to host communities.

To prevent this growing crisis, state legislation must prohibit the construction of data centers on Superfund sites. In conjunction, local governments must update outdated zoning ordinances to prevent data centers from being sited in overburdened communities. The exponential increase in energy demand and data center size has outpaced zoning codes in “light industrial zones” originally intended for industries with less impact than hyperscale data centers. As a result, data center proponents have [exploited](#) these zones for planned infrastructure development. Furthermore, when developers apply for permits, local ordinances should require them to [address health and safety concerns](#), including water and energy consumption, noise pollution, and [proximity to residential areas](#), before approval.

¹¹ A Superfund site is an abandoned waste site defined under CERCLA. The Superfund program addresses and funds cleanup to these sites which contain hazardous waste or contaminants that threaten public health.

¹² President Trump has signed [The One Big Beautiful Bill](#) into law, rescinding funding for many climate and environmental data and tracking programs

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2. Strengthen government capacity for air quality monitoring and enforcement

The proliferation of data centers in the state without sufficient regulatory oversight to monitor environmental effects is a perilous path forward. Despite the presence of the BAAQMD, the agency is inadequately staffed¹³ to proactively address issues related to the surge in data center development. State legislation must allocate more funding to build the capacity of this agency to increase the frequency of inspections, carry out both routine and non-routine visits, and enact enforcement consequences when data centers are non-compliant. In addition, funding could add to material resources, such as real-time monitoring systems to alert inspectors of compliance-related issues. State investments in proactive monitoring and enforcement are essential to accurate reporting and holding data center developers and AI companies accountable for potential community harm.

3. Require that data centers' utility usage and environmental impact data be publicly accessible

The lack of transparency in data center development and the [expanding lobbying efforts](#) of tech companies to minimize legislative guardrails have allowed [the industry to obfuscate environmental impact](#) and [emissions data](#), thwarting efforts to evaluate a data center's overall impact on an overburdened area. California [introduced legislation](#) in the 2025 legislative cycle to incrementally improve water and energy usage transparency, but the attempts were unsuccessful. On behalf of its residents, the state must continue to work on passing meaningful legislation that requires greater transparency in making data center usage and impact information publicly accessible for government officials and residents alike. This information should include details like electric and water usage, [pollution emissions from standby generators, and contaminant discharge](#). Additionally, *proposed* data centers should be required by the state to disclose their expected water and power use 90 days in advance of permit approval, so that community-based organizations (CBOs) and local governments are fully apprised prior to any final approval decisions. Although critics argue that legislation requiring transparency could [force businesses to divulge trade secrets](#), it remains clear that transparency will enhance accountability and prevent a select few companies from dictating when and how states' resources are used—and who must bear the brunt of impacts.

¹³ BAAQMD deploys [only forty inspectors](#) to cover [10,332 permitted facilities and 23,127 operations and devices](#).

4. Require data center developers to develop and implement community benefit agreements

As corporations turn to [negotiating non-disclosure agreements \(NDAs\) with local governments](#) regarding data center development, the need for greater agency at the local community level continues to grow. To build greater accountability mechanisms and processes that foster more responsible data center development, state legislation should require data center developers to develop and implement [community benefit agreements](#) (CBAs). CBAs can enable coalitions and organizations to negotiate with legally binding power, enhancing transparency and clarifying the projected impacts of a data center project on a neighborhood. CBAs could benefit neighborhoods by requiring disclosure of projected local utility usage or by undertaking health impact assessments (HIAs) and environmental impact reports (EIRs). Further, CBAs can help [meet the community's needs](#) through monetary benefits to a [community fund](#) or non-monetary benefits, such as commitments to workforce development and environmental stewardship. These commitments could also incentivize data center developers to better align with public investment goals and priorities, and give better credibility to programs such as Digital Realty's [community engagement program](#).



CONCLUSION

The continued development of data centers in overburdened Californian communities both reinforces and replicates an [established industrial pattern](#) – one that further harms vulnerable populations. There has been a [growing movement of community resistance](#), including journalists uncovering the impacts of data center development, community organizers countering Big Tech's influence in opposing regulation, and researchers preserving existing environmental data [at risk of federal erasure](#) and [documenting projected public health harms](#) caused by data centers. Yet, these efforts alone are insufficient to protect communities in the long term. Amidst the backdrop of [increased community opposition](#) to large-scale data center projects, policymakers must enact legislation that safeguards the public from health harms as well as rising utility costs. As AI innovation continues to outpace guardrails, we are at a pivotal moment: we must take a [justice-centered approach](#) to protect communities that already face harms due to legacies of environmental racism and structural inequity.

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APPENDIX

Data Sources

CalEnviroScreen

CalEnviroScreen is a tool created by the California Office of Environmental Health Hazard Assessment (OEHHA). It uses environmental, health, and socioeconomic data to calculate the impact of various pollution sources on communities throughout California. For more information about CalEnviroScreen and its methodology, please refer to the [OEHHA website](#). Though comprehensive, CalEnviroScreen does not encompass the full range and scope of lived experiences and realities regarding pollution in specific neighborhoods.

Data Center Map

Data Center Map maintains a global database of data center locations and information. For more information on their methodology, please refer to their [website](#).

There are several limitations to any dataset about data centers. Since companies are not required to publish information about their data centers, it is difficult to gather complete and accurate data. Many datasets have large discrepancies in the number of data centers in the United States; for example, Statista published that there were [5,381 data centers](#) in March 2024 and [4,165 data centers](#) in November 2025. We chose to use Data Center Map because they offer exports of data for researchers. We acknowledge that information about data centers is constantly changing; our analysis used data accessed on December 26th, 2024.

Our original dataset contained 288 data centers in California. We revised the dataset to only count colocated data centers once, so that any data centers sharing the same address (and therefore the same census tract) would not skew our results. The resulting dataset contained 227 data centers, 226 of which had addresses.

ABOUT US

The Kapor Foundation works at the intersection of racial justice and technology by removing barriers in order to make the technology ecosystem more diverse, inclusive, and impactful for communities of color. The Kapor Foundation is a recognized leader in the movement to transform the technology ecosystem by expanding access to computer science education, conducting research on disparities in the technology pipeline, supporting nonprofit organizations and initiatives, and investing in gap-closing startups and entrepreneurs. For more information on the Kapor Foundation and the Kapor family of organizations, SMASH and Kapor Capital, visit www.kaporfoundation.org.

SUGGESTED READINGS AND RESOURCES

Institutes and Non-Profits

- [Amazon Employees for Climate Justice](#)
- [Enabled Emissions Campaign](#)
- [NAACP Environmental and Climate Justice](#)
- [Open Environment Data Project](#)
- [Public Environment Data Partners](#)
- [Rooted Futures Lab](#)
- [The Impact Project](#)
- [West Oakland Environmental Indicators Project](#)

Research and Advocacy

- An Assessment of California Data Centers: Environmental and Public Health Impacts ([Next10](#))
- Cloudy with a Loss of Spending Control: How Data Centers are Endangering State Budgets ([Good Jobs First](#))
- Data Centers aren't the future of American prosperity ([Data&Society](#))
- Data Center Boom Risks Health of Already Vulnerable Communities ([Tech Policy Press](#))
- Empire of AI ([Hao, 2025](#))
- Environmental Burden of the United States Data Centers in the AI Era ([Harvard School of Public Health](#))
- Frontline Framework Community Data Center Guiding Principles ([NAACP](#))
- New and proposed data center sites ([FracTracker Alliance](#))
- Questions to Ask when Your City is Building a Data Center ([AllAI](#))
- The Environmental Impacts of AI - Policy Primer ([Hugging Face](#))
- The People Say No: Resisting Data Centers in the South ([MediaJustice](#))
- The Unpaid Toll: Quantifying the Public Health Impact of AI ([UC Riverside and CalTech](#))
- Where Cloud Meets Cement ([The Maybe](#))