



## CALIFORNIA PILOTS ASSOCIATION

Congresspersons Lofgren, Eshoo, Khanna, and Panetta,

Our organization, The California Pilots Association (CalPilots), whose mission is the preservation, promotion and protection of General Aviation airports, along with our chapters, business partners, and members are compelled to respond to your press release of February 23, 2022. It expressed “serious concerns ...about environmental justice” with regard to leaded aviation fuel at Reid Hillview Airport in San Jose. We believe that the threat is significantly overstated and intended to foment fear and anger in the community.

Our goal in responding to your interest of leaded aviation fuels is not to minimize the issue. We agree that removal of aviation leaded fuels needs to be done but it must happen in a safe, responsible manner that balances the needs of the community with the safety of both the citizens who live around the airport and the airmen who fly over it. Remember, we are not looking at a single airport or county but at an aviation system that includes over 13,000 airports, many of which are a vital lifeline to the community they serve, and involves billions of dollars in investment and tens of thousands of jobs.

As you may be aware, it is the aviation community (and particularly the aviation businesses at Reid Hillview Airport) that have driven the move to Unleaded Aviation Fuel (Avgas) at the airport and in the county. They did so to benefit the surrounding community and prove that they can be an environmentally friendly neighbor.

The studies conducted thus far have attempted to point the finger of the lead problem at aviation but have failed to provide actual quantifiable data proving that fact. In fact, Dr. Zahran stated that transitioning to Unleaded Avgas would mitigate any future lead impact from aviation and the soil sampling being conducted now specifically excludes determination of lead sources according to Director of Roads and Airports Harry Freitas. Please review the following document by Michael McDonald which responds to these findings: <https://calpilots.org/wp-content/uploads/2022/03/Response-to-EPA-regarding-Lead-Final-20220228-2.pdf>.

It would appear that the term “crisis” when referring to airborne lead is an overreach. It should be noted that BAAQMD (Bay Area Air Quality Management District) stopped monitoring airborne lead levels at Reid Hillview some time ago and filed for an exemption from airborne lead monitoring for the airport because lead levels historically have been well below EPA thresholds.

We also suggest that referencing ACRP 02-34 and ACRP 162 (National Academy of Sciences: Transportation Research Board - Airport Cooperative Research Board) for scientific studies on Airport Lead and Airport Lead Studies will further assist in understand airport and airborne lead sampling data.

It should also be noted that, while lead levels are always a concern for the health of the community, no study has been conducted (the database reflecting Blood Lead Level (BLL's) samples have been collected for over a decade) and the results addressed by the California Department of Health Childhood Lead Poisoning Prevention Branch to determine how lead has been ingested in the community. See the 2020 Report: <https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/CDPH%20Document%20Library/CLPPBReport2020.pdf>

We also recommend referencing the following article: The Elephant in the Playground - confronting lead-contaminated soils as an important source of lead burdens to urban populations - <https://pubmed.ncbi.nlm.nih.gov/20173294/>. Clearly, lead contamination sources need to be identified and addressed but this must be done so rationally and in a proportional manner. Lead paint (yes, we are aware of the \$300 million lead paint settlement that thus far is mostly untouched) which can leach into the soil and contaminate food sources, pipe solder (50% lead), automobile lead, and agriculture are among the sources that contribute at a far greater level than aviation ever could, but we agree that the safe, systematic removal of aviation sources of lead is both desirable and inevitable.

We recommend you also look at BLL's in a greater context. High levels of BLL's in Santa Clara County are below the state average, Santa Cruz County's exceed those found in San Jose by a not insignificant margin and those in portions of San Francisco are over FOUR Times that of the area around Reid Hillview and there is no airport located within that locale. We would also refer you to these articles on lead in Oakland and around Reid Hillview Airport in San Jose:

<https://www.sfgate.com/local/article/Lead-contaminating-Bay-Area-neighborhoods-16921146.php> and <https://sanjosespotlight.com/san-jose-airport-lead-levels-are-average-despite-alarm/>

Finally, we want to bring to your attention an issue that we believe is more important to the residents of San Jose and that is the impact air pollution (and especially particulates in the air) are having on our children. For the record, this is not a new subject of interest - the San Jose State Meteorology Department conducted studies beginning in the mid-1970's on the cause of concentrations of air pollution in the South Bay Area. They focused on three reasons for the issue - the topography of the valley, the persistent inversion layer and the prevailing winds. What they found was a significant concentration of air pollution over areas of the southern Santa Clara Valley.

It is important to understand the real and permanent impacts airborne particulates have on IQ and other human functions. One study, the [Socioeconomic disparities and sexual dimorphism in neurotoxic effects of ambient fine particles on youth IQ: A longitudinal analysis](#), is particularly important given the concentrations of particulates found in the areas around Reid Hillview Airport. The links to these studies are below:

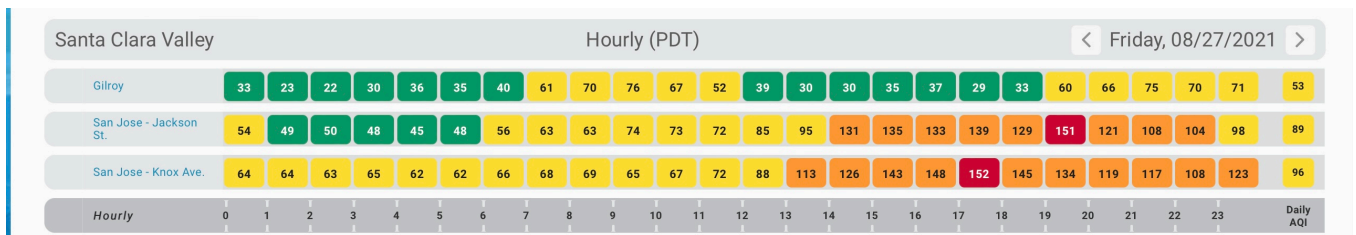
<https://www.calhealthreport.org/2018/01/31/teen-exposure-air-pollution-reduce-iq-levels-long-term/>

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0188731>

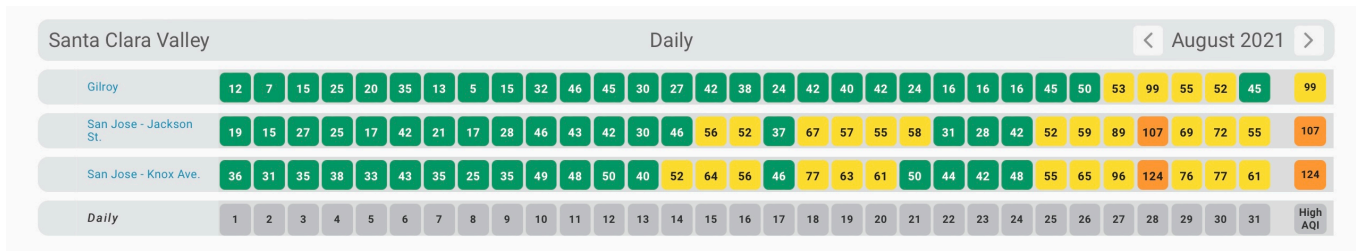
**You will note that, based on the particulate levels in the area around Reid Hillview and using the calculations found in the studies, the impacts on our children from air pollution are 10 to over 100 times greater than that which has occurred from lead and over a thousand times greater than that of airborne lead.**

In order to provide context to the air pollution discussion and dispel the myth of this being an "environmental justice" issue, we want to provide the following sample data from the BAAQMD and IQAir websites to assist in visualizing the issue.

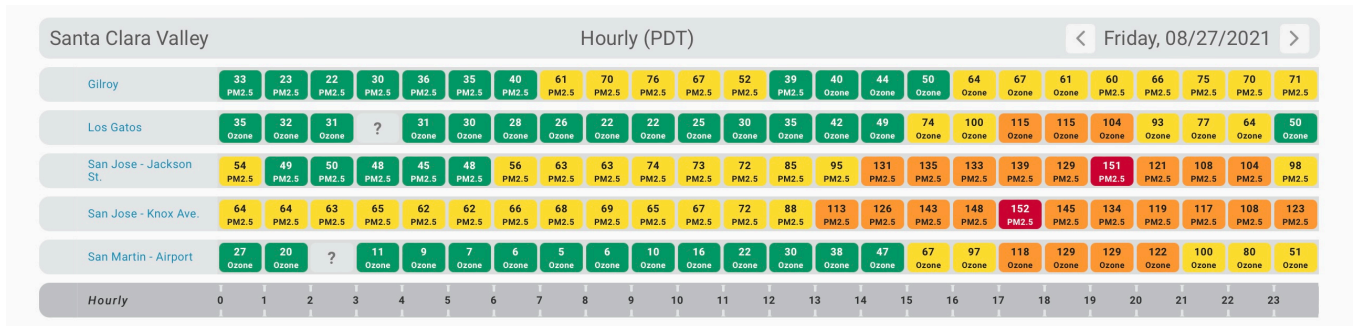
Graphic 1 is a representation of the Air Quality Index for the month of August, 2021:



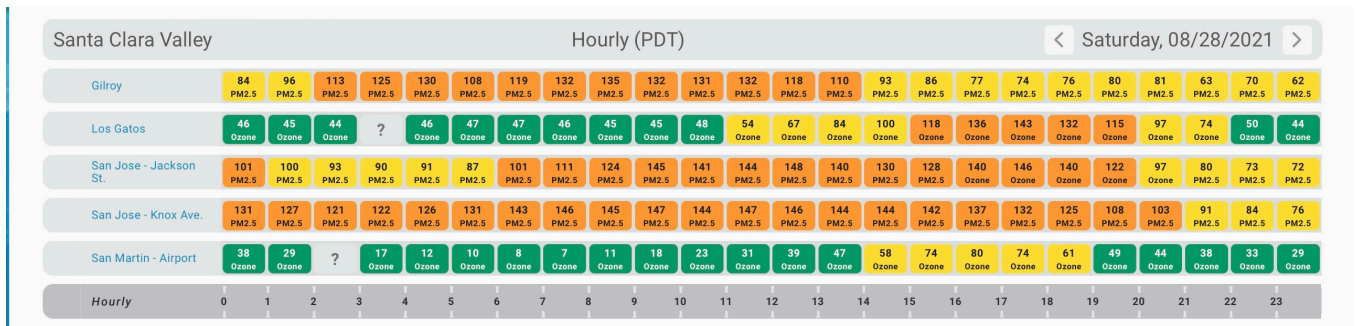
Graphic 2 is an hourly chart of the Air Quality Index for August 27, 2021:



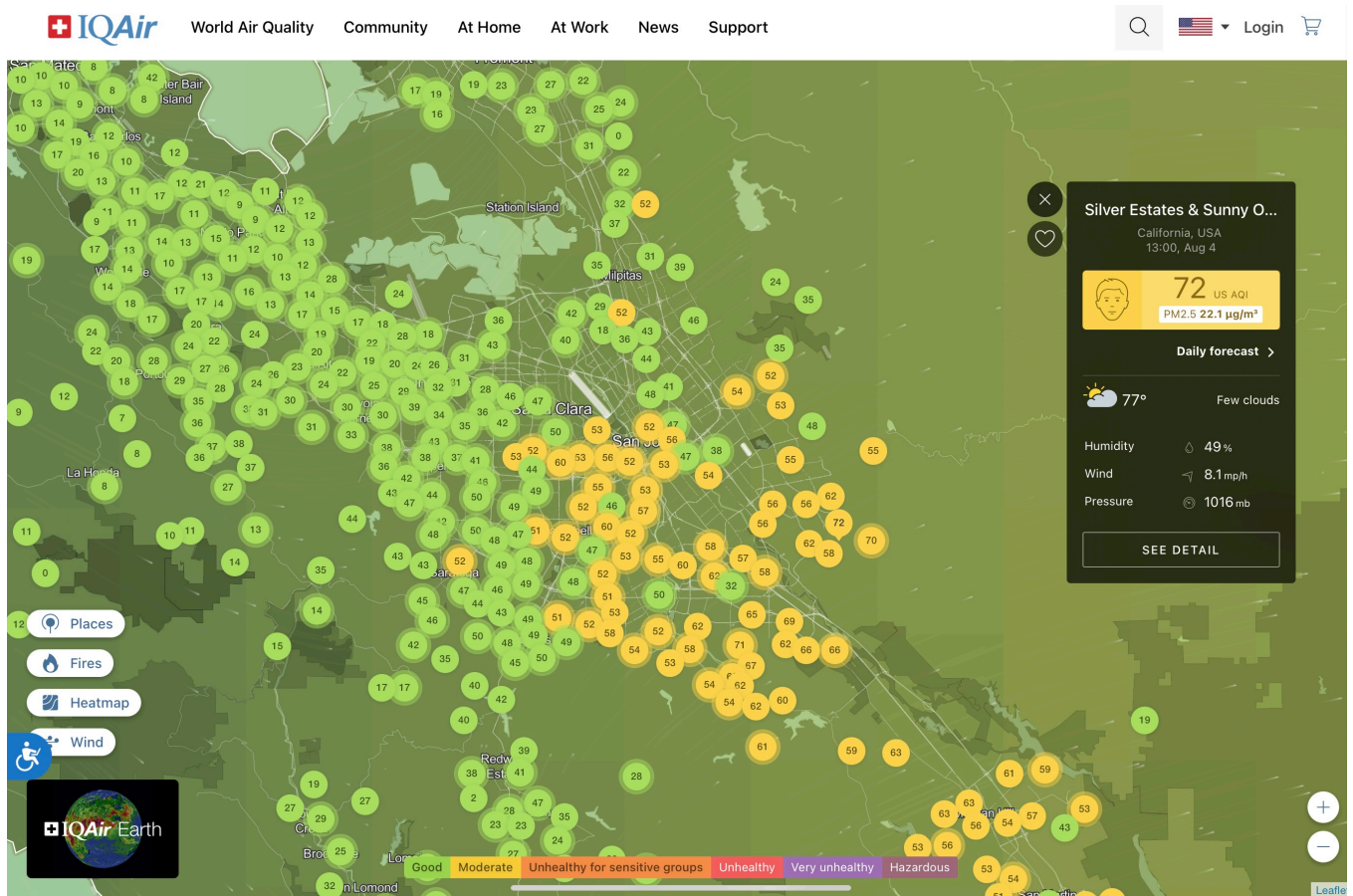
Graphic 3 is the hourly AQI for August 27, 2021 with the prevailing pollutant shown. Note that the two San Jose sites showed excessive particulate levels.



Graphic 4 is for August 28, 2021 and again demonstrates that particulate levels in the San Jose sites are the primary pollutant.



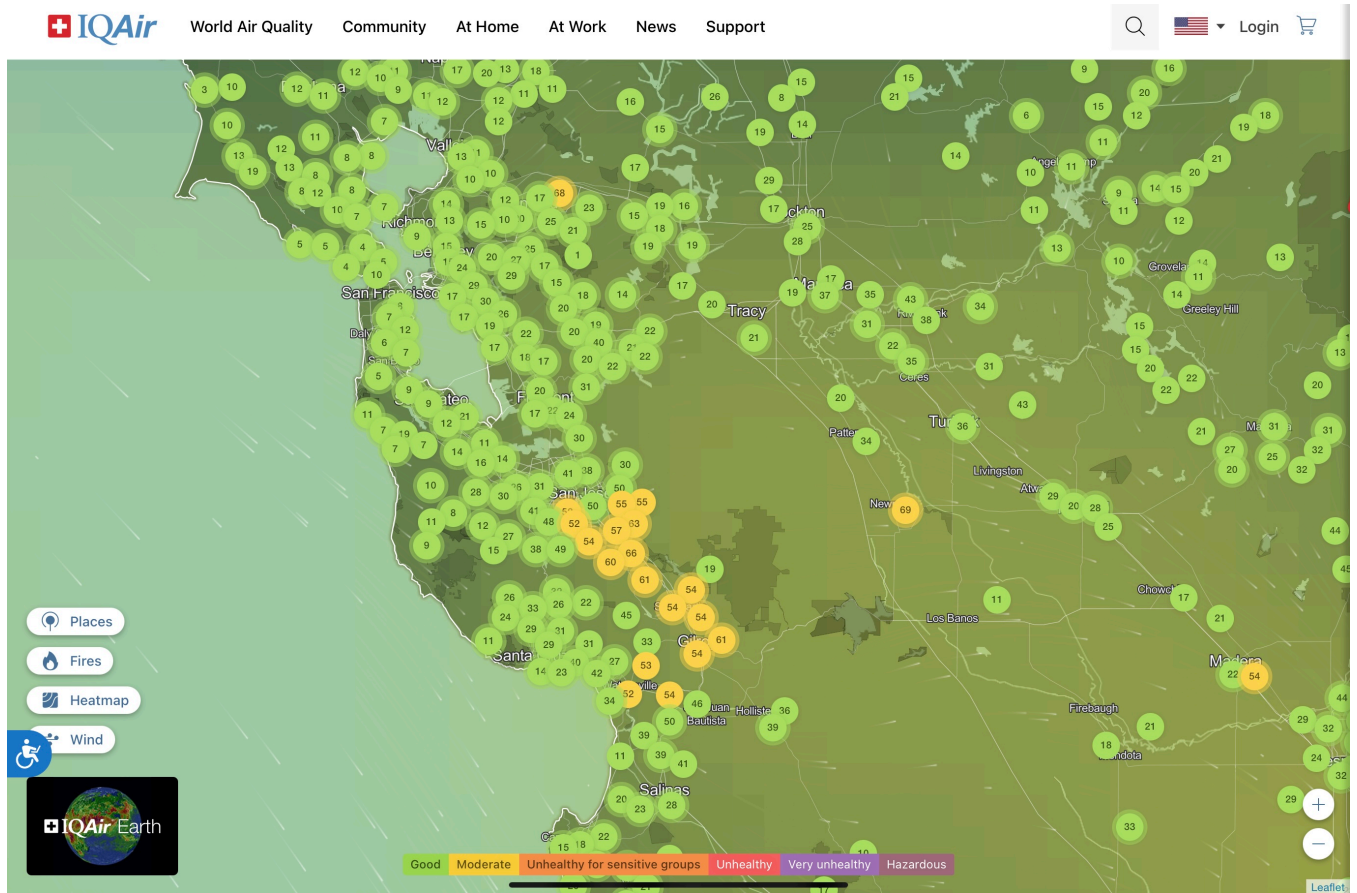
Graphic 5 shows a broad view of the Bay Area and demonstrates the concentration of air pollution around southern Santa Clara Valley.



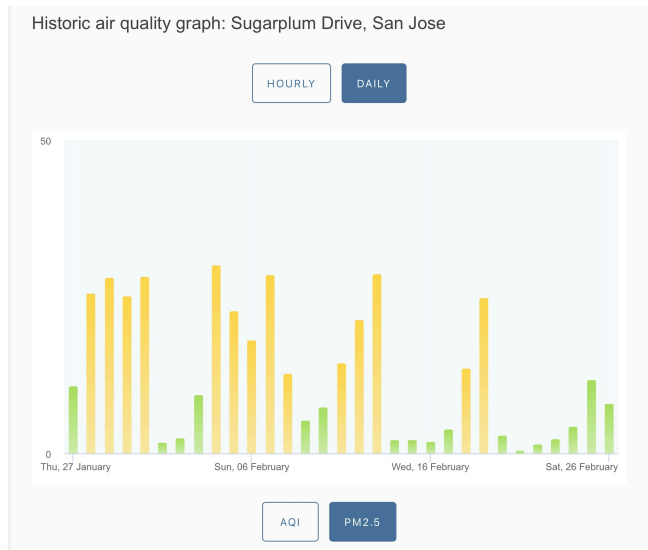
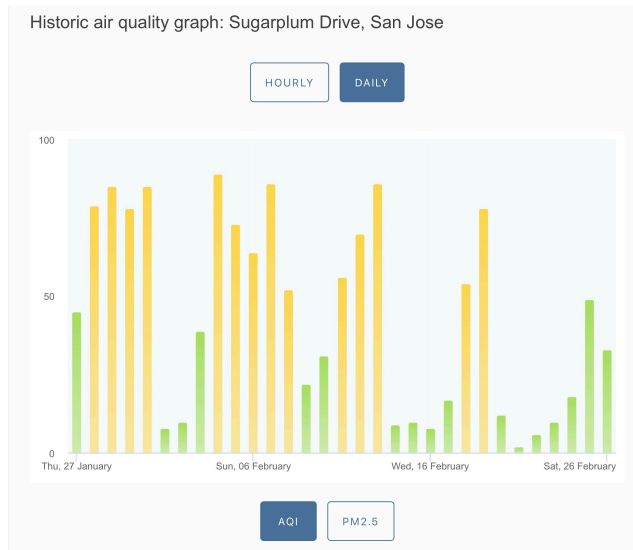
The box in the graphic indicates two values of importance when considering the level of pollution, AQI (the Air Quality Index) and PM2.5 (the particulate level in the air). In this instance, the AQI of 72 indicates a “Moderate” level of pollution but the PM2.5 of 22.1 indicates a higher level of particulate matter in the air that well above “Spare the Air” levels and could impact health.

This graphic clearly demonstrates the three factors funnel air pollution into the southern Santa Clara Valley.

Graphic 6 shows an even wider view of the air pollution levels around the region. It should be noted that there are three large airports - San Francisco International, Oakland International, and San Jose International - and dozens of General Aviation airports (including Reid Hillview) contained within this graphic. Note that none of those areas show pollution levels anywhere near those of southern Santa Clara County, thus indicating that airports are not the source of high local particulate levels.



Graphic 7 shows the monthly AQI and particulate readings for the past month found just east of Lake Cunningham Park.



Graphic 8 shows the monthly AQI and particulate readings for the past month found just north of Silver Creek High School in San Jose.



Is this problem significant? Is it more significant that airborne lead? We believe so, but please don't take our word for it. Here are two documents that you should review before you come to any conclusions:

<https://www.iqair.com/us/lp/blog/new-parents/can-clean-air-increase-child-iq?>

<https://www.iqair.com/us/usa/california/san-jose>

The second one contains some important information on just how significant our particulate problem is in the South Bay Area. Here are some highlights:

In 2019, San Jose air quality averaged an overall US AQI rating of "good" and additionally met the more stringent World Health Organization (WHO) target for annual PM2.5 exposure of <math><10 \mu\text{g}/\text{m}^3</math>, with an average of

Past years have not been as clean. In 2018, San Jose AQI was 52 ("moderate") exceeding both US Environmental Protection Agency (EPA) standards and the WHO annual target for PM2.5 by

According to the State of the Air Report by the American Lung Association, San Jose (including the San Francisco and Oakland area) ranked 3rd for worst 24-hour particle pollution out of 216 U.S. metropolitan areas and 5th for worst annual particle pollution out of 204 U.S. metropolitan areas.

Currently, motor vehicles account for roughly 30% of San Jose's [fine particulate matter \(PM2.5\)](#).

Outside of daily emission sources, [San Jose's environment can be problematic in dispersing air pollution](#). The city's location on the southern shore of the San Francisco Bay means that the local climate is often affected by marine inversions, a weather event describing cool surface-

level ocean air trapped by warmer air above. Marine inversions can cause air pollution to accumulate and linger in the lower atmosphere until weather conditions change. The mountains surrounding the city can also have a similar effect, additionally exacerbating marine inversions.

Spare the Air alerts correlate with the US air quality index (AQI) system and are usually dictated by high levels of PM2.5 or ozone pollution. When the San Jose AQI exceeds 100, “unhealthy for sensitive groups,” an alert is published. This correlates with either a PM2.5 concentration over 35.4 µg/m<sup>3</sup> or an ozone concentration over 70 ppb. **(Note: While “Spare the Air” alerts may not be issued by BAAQMD for the entire area, specific areas and monitoring sites located around the the county may meet or exceed the levels required for the issuance of such alerts.)**

In San Jose, Spare the Air alerts for PM2.5 pollution typically occur in the winter or during wildfire season. In 2019, for example, November was the most polluted month in San Jose as a result of the Kincade Fire that burned in Sonoma County, which caused a Spare the Air alert to be issued as AQI levels reached 150 and higher, “unhealthy.” 2020 saw the highest frequency of Spare the Air alerts in the Bay Area as a result of a record-breaking wildfire season, which caused 51 alerts by October alone.

Our organization welcomes your comments and questions. Thank you for taking the time to view our opinions.

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