

LEADED AVIATION GASOLINE EXPOSURE RISK IN SAN JOSE, CA

Cindy Chavez
Santa Clara County
Board of Supervisors

Aviation Noise & Emissions Symposium
March 4-6, 2024 - Palm Springs, CA

SUPERVISOR CINDY CHAVEZ COUNTY OF SANTA CLARA BOARD OF SUPERVISORS

- Elected in 2013. Reelected twice
- Represents District 2 in San Jose, California
- Chairs Valley Transportation Authority
- Caltrain Board of Directors
- Metropolitan Transportation Commission
- Former Chair of Bay Area Air Quality Management District
- Chairs County Children, Families and Seniors Committee
- Serves on County Public Safety and Justice Committee



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DISTRICT 2 IN SAN JOSE, CA

- San Jose: Capital of Silicon Valley
- Represent 500,000 residents
- Includes portions of central, eastern, and southern San Jose
- Most tightly packed and urbanized of the five districts
- Multigenerational families
- Immigrants and first-generation Americans
- Many speak languages other than English at home

DISTRICT 2 REID-HILLVIEW AIRPORT



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Timeline:

- 1937: Opened for private use
- 1961: County purchased
- 1980s: First groundswell of airport concerns from residents/County Board
- 1996: Attempt by Board to consider closure due to safety concerns
- 2008: Second attempt failed

Quick facts:

- General aviation airport
- Small aircraft only
- Nearly 200 acres
- Located near major highways, expressways, throughways, public transit
- Training for amateur pilots
- Six schools, three public parks within 1,200 feet of RHV

REID-HILLVIEW AIRPORT



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CONCERNS FROM RESIDENTS

- Surrounded by neighborhood, single-family homes, apartments/condos
- Demand for alternative uses such as mixed-use development, education, recreation, community assets, and transit-oriented development
- Incompatible land use

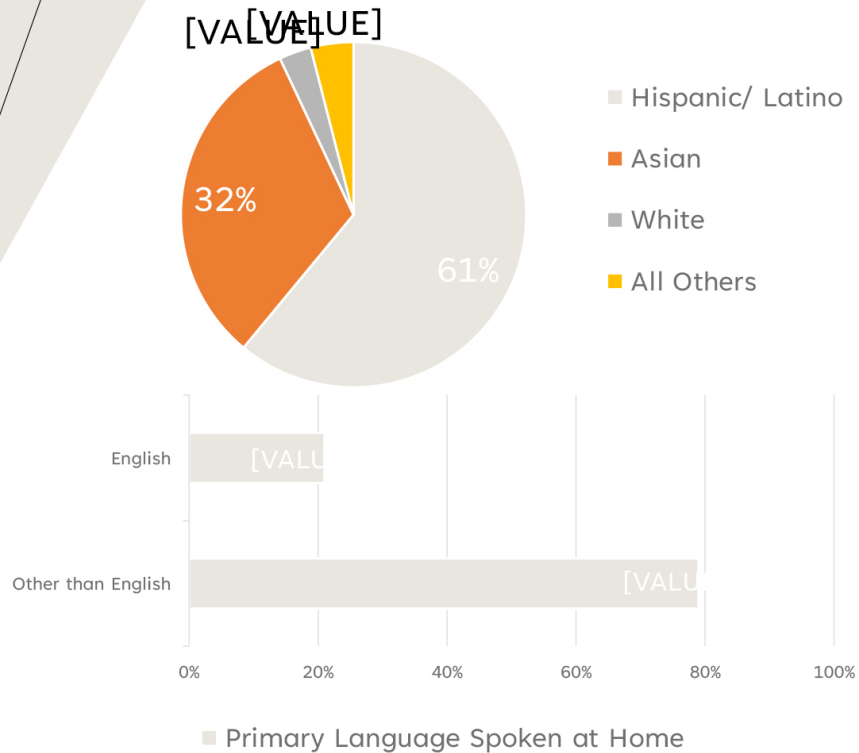


Common resident complaints:

- Noise
- Emissions
- Fear of crashes

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DEMOGRAPHICS NEAR REID-HILLVIEW AIRPORT

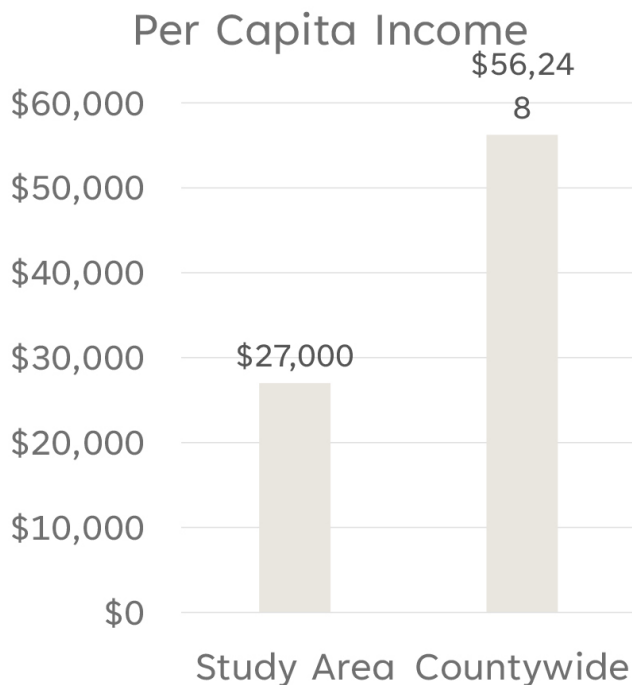
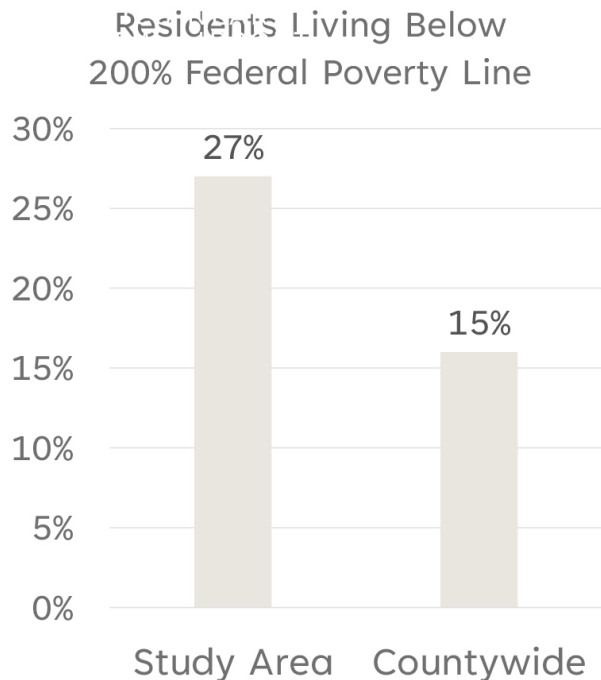


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DEMOGRAPHICS NEAR
REID-HILLVIEW AIRPORT



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2018: ACTION TAKEN BY SANTA CLARA COUNTY

- Affirmed County's 2011 decision to not take FAA airport improvement grants
- Airport closure by 2031
- Undertake land use study for post-aviation future use
- Study health impacts of emissions from lead-fueled aviation



[Link: December 2018 meeting report](#)

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[Link: Airborne Lead Study](#)

WHY A LEAD STUDY?

- Center for Disease Control: “There’s no safe level of lead in blood”
- A 2008 US EPA ranked RHV 25th out of 3,414 US airports with an estimated 1,279 pounds of lead emitted annually
- In 2020, the US EPA reported that RHV is one of the few US airports where lead emissions from piston aircraft exceed National Ambient Air Quality Standard (NAAQS) for lead
- County lead study was a tool to affirm prior EPA studies and public concerns
- Lead exposure causes neurological damage to infants and children and stunts IQ
- Thousands of children live and go to school or play next door to RHV
- Lead causes high blood pressure and heart disease in adults

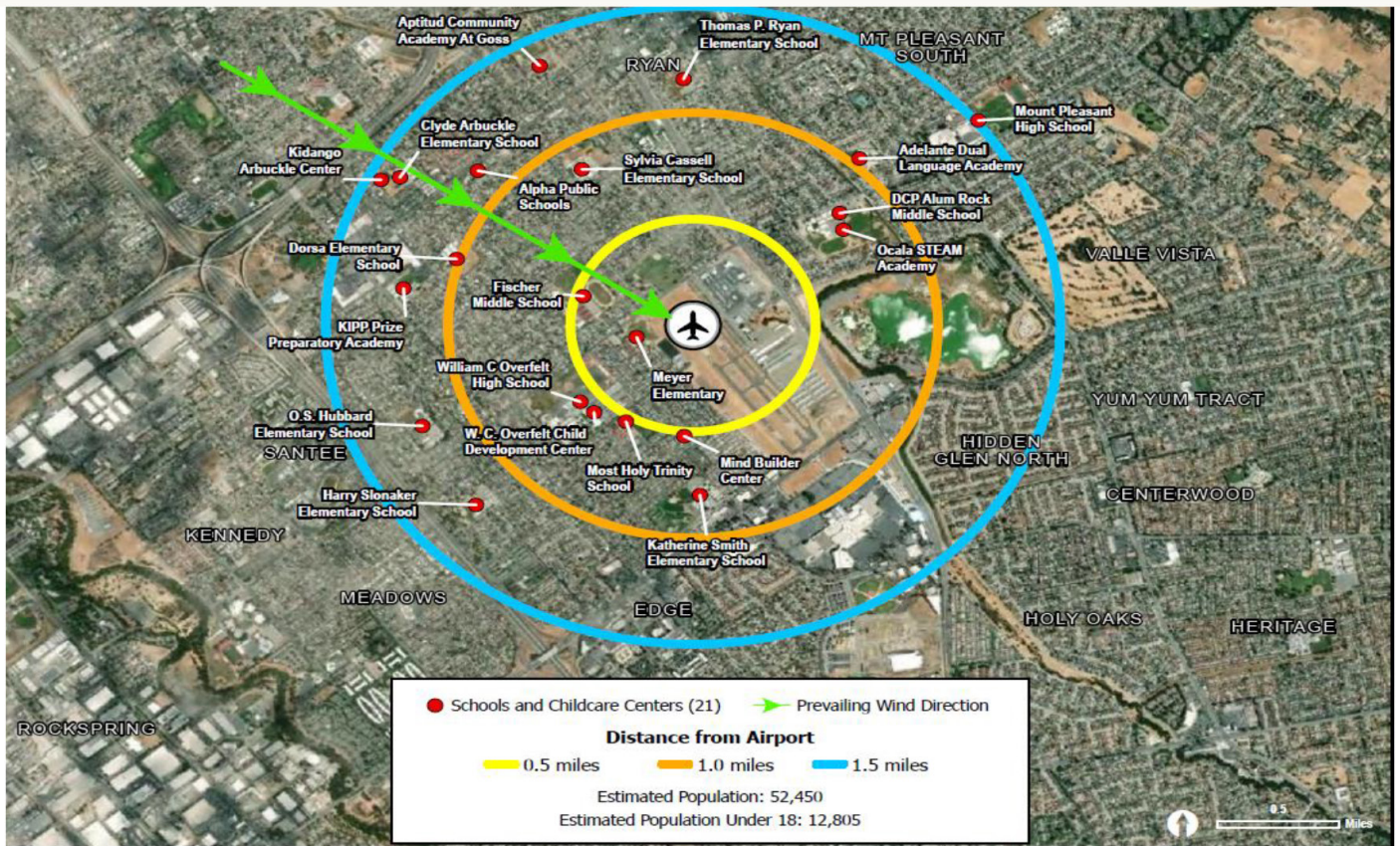
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THE LEAD STUDY

- Commissioned by the County of Santa Clara
- First study seeking to document any impact of lead-fueled aviation on blood lead levels of actual children
- Led by Dr. Sammy Zahran and the Mountain Data Group – Link: [Dr. Zahran Bio](#)
- Comprehensive and controlled study reviewed 10 years of data
- Studied the blood levels of 13,000 children
- Controlled for non-aviation lead (paint, old pipes, etc.)
- Peer reviewed
- Study released August 2021
- Presented to the Santa Clara County Board of Supervisors days later

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LEAD STUDY: RELEASED AUGUST 3, 2021

Key finding: The continued use of leaded aviation fuel has contributed to increased blood lead levels, particularly for those within a half-mile of the airport.

[Link: Full Study PDF](#)



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LEAD STUDY FINDINGS

- BLLs of samples children increase significantly with proximity to the airport
- BLLs are significantly higher among children residing east (and predominantly downwind) of the airport
- BLLs of sampled children increase significantly with aircraft traffic at airport and monthly quantities of aviation gasoline sold from the date of blood draw
- Children who live within a half-mile of the airport had blood lead levels 20% higher than children living between half-mile to 1.5 miles from the airport
- Correlated blood lead levels with the proximity of a child's home and school to the airport
- Children who commute toward the airport to attend school present substantially higher blood lead levels than children who commute away from the airport

FALLOUT: ACTION TAKEN ON AUG. 17, 2021

- Accepted the study
- Immediately take all available actions to prevent continued lead exposure from Reid-Hillview
- Offer technical assistance to other jurisdictions
- Education and awareness campaign
- Update County Health Assessments to include study
- Continue visioning process for future of RHV
- Community engagement
- Test blood levels of incarcerated youth
- County lead screening and prevention activities
- Placed study in peer-reviewed scientific journal
- County Counsel submits petition to EPA for endangerment finding
- Secure unleaded avgas for County-owned airports
- Phase out unleaded avgas by Dec. 31, 2021



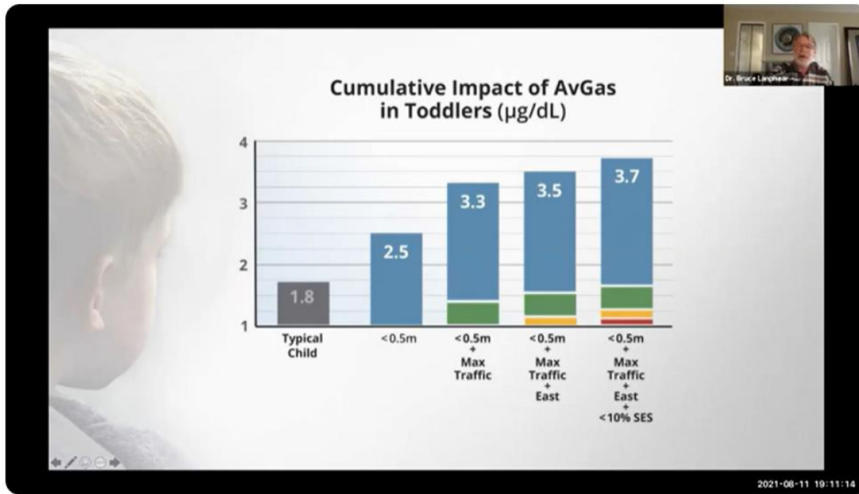
[Link - August 17 meeting report](#)

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COMMUNITY OUTREACH



San José Community Meeting on Reid-Hillview Airport Airborne Lead Study – August 11, 2021


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- Two lead study Community Meetings via Zoom to explain the study
- Educational campaign via County Website and County Health Department
- Emails, invites to speak at BOS meeting
- County office of public affairs portal
- Worked with the media
- County response: PHD Childhood Lead Prevention Program website updated with prevention and education information:
 - Common sources of lead exposure
 - How to protect your family from lead
 - Healthy eating to prevent lead poisoning
 - What can the CLPPP do for my family?

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SWITCH TO UNLEADED AVGAS

- Direction from Board after lead study findings
- On 1/1/22, County took over fuel supply at both County airports
- County now offers exclusively unleaded fuel
- Planes can still fly in with leaded avgas but must refill elsewhere



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EPA ENDANGERMENT FINDING

- Petition to EPA
- Preliminary finding in 2022
- EPA Endangerment Finding in October 2023:
- *EPA has issued a final determination that lead emissions to air from certain aircraft engines cause or contribute to air pollution which may reasonably be anticipated to endanger public health and welfare*
- New rules and regulatory standards to be crafted

[Link: EPA announcement](#)

WHAT COMES NEXT?

- Momentum is building
- Increased interest from other jurisdictions
- We are here to help and listen

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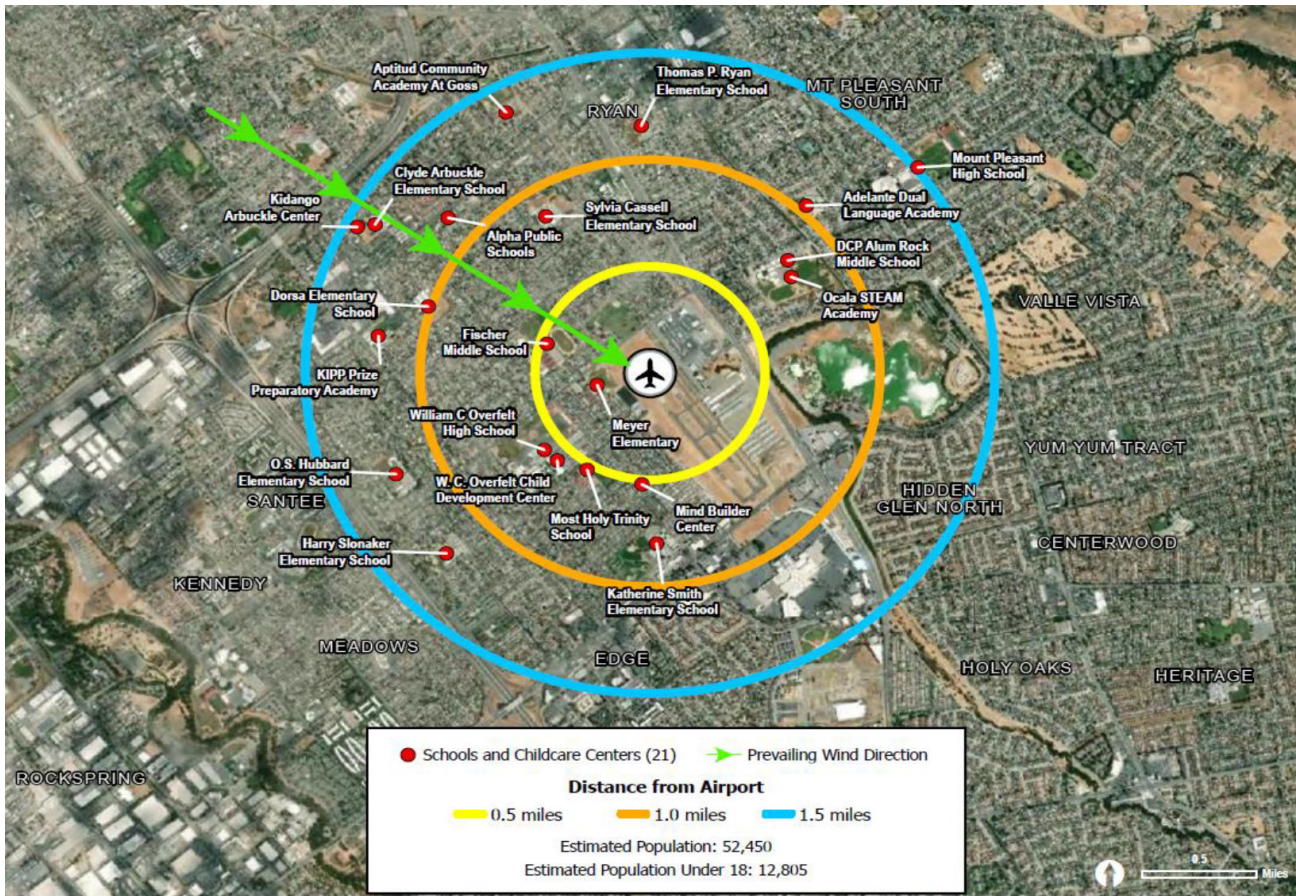


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Q&A

Thank You!



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