

# **Reid Hillview Airport Airborne Lead**

**Bay Area Air Quality Management District (BAAQMD)  
Data Analysis**

**Presentation by Douglas Rice - CalPilots Regional Vice-President**

**Data/Statistical Analysis by Stephen McHenry**

The Santa Clara County Airport Commission has had a standing item on the agenda for over a year requesting a report from the Bay Area Air Quality Management District (BAAQMD). BAAQMD has not responded and no report (written or verbal) has been received.

July, 2023 - CalPilots made a California Public Records Request (CPRA) for information regarding Airborne Lead Levels from BAAQMD PRCA monitoring sites.

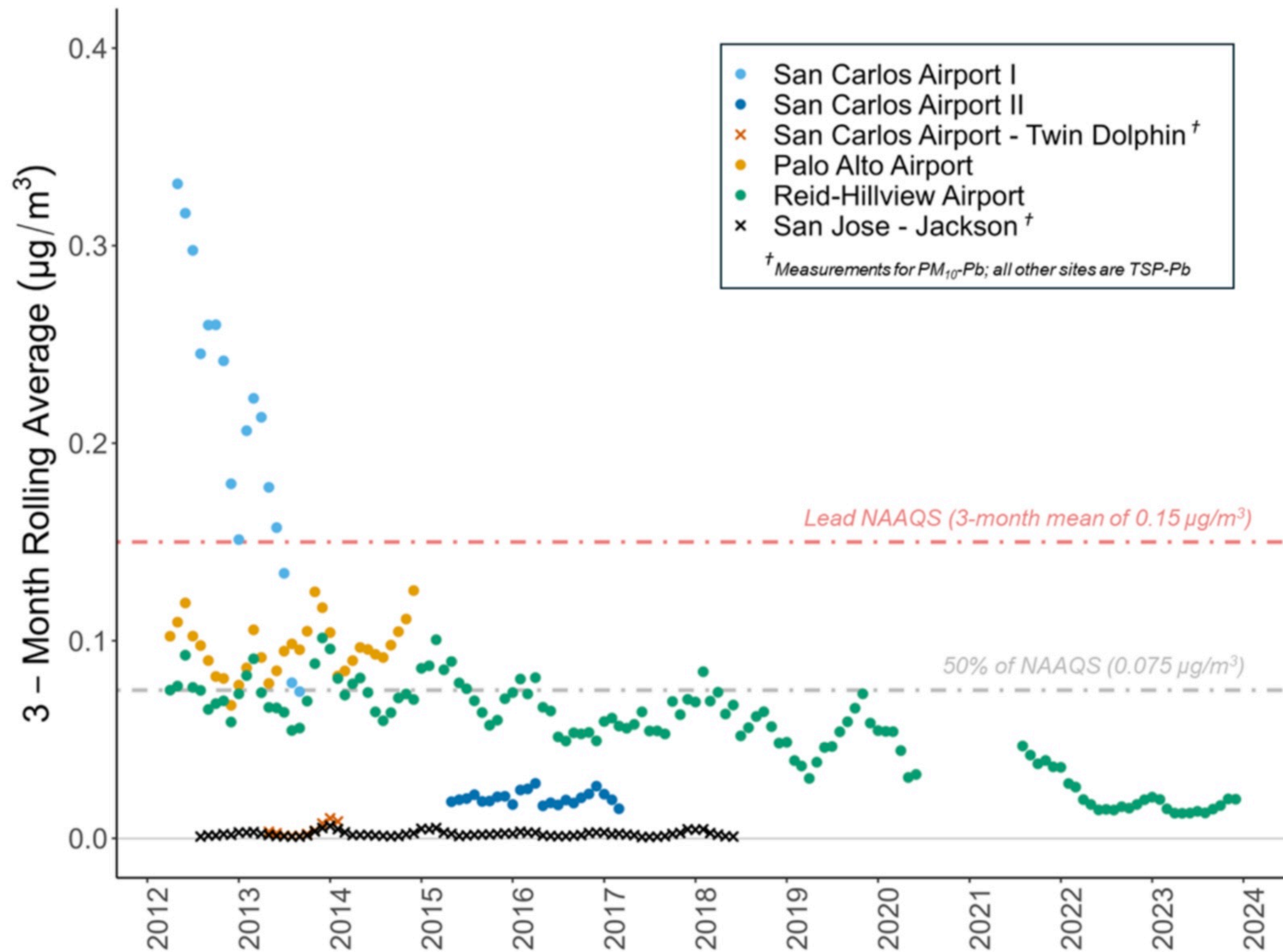
March, 2024 - At San Martin Airport, I engaged with a BAAQMD technician working on the San Martin Airport monitoring site seeking assistance in getting a response from BAAQMD.

June, 2024 - CalPilots sent a letter to the BAAQMD Executive Director advising him of our prior request and the unusable response. We requested that BAAQMD provide data in a usable form.

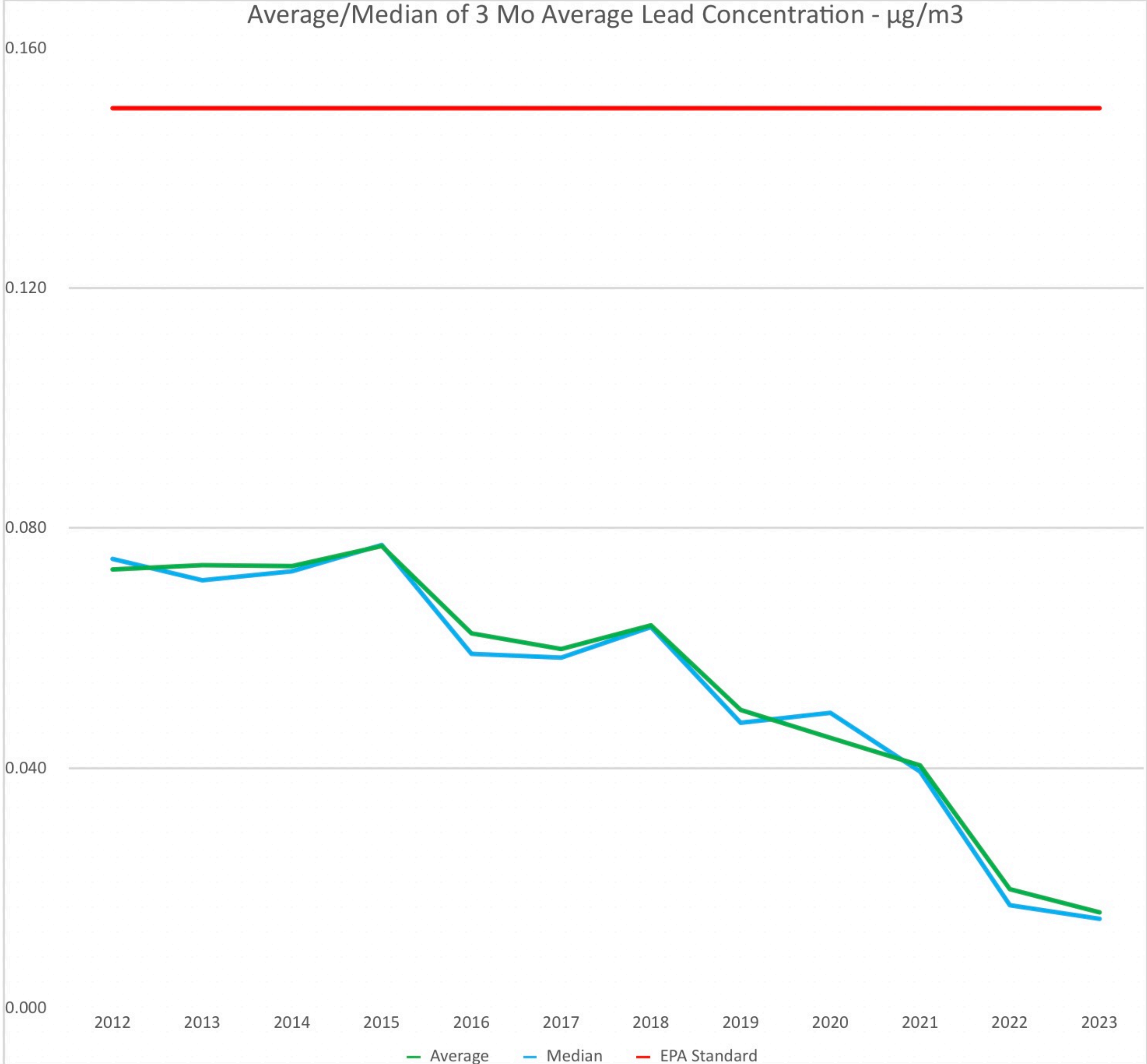
July, 2024 - BAAQMD provided a spreadsheet containing usable data for Reid Hillview Airport for the years 2012 to 2023 as well as miscellaneous data from other monitoring sites.



# 3-Month Rolling Average Lead Concentrations : 2012 – 2023



Average/Median of 3 Mo Average Lead Concentration -  $\mu\text{g}/\text{m}^3$



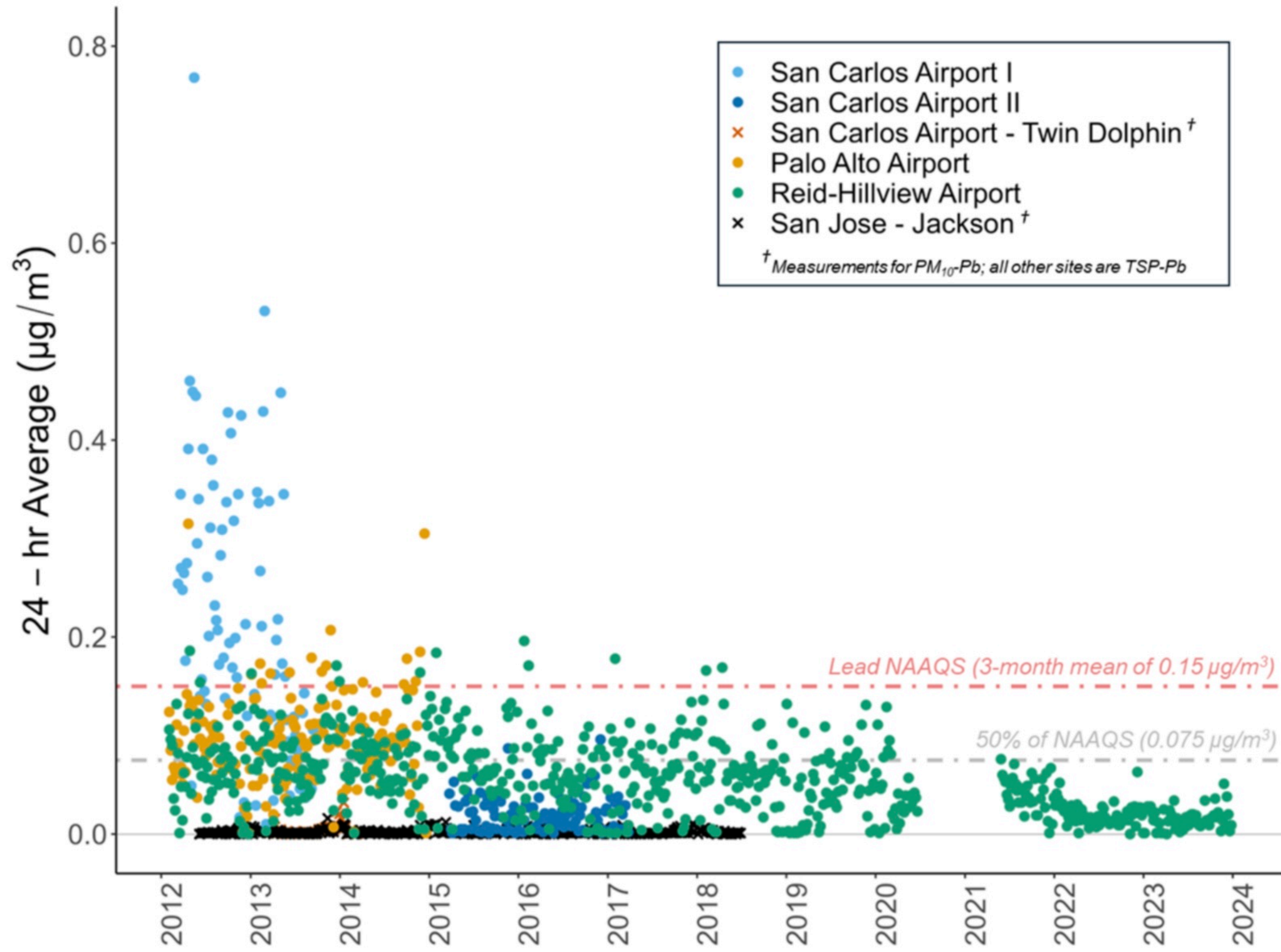


Airport	Measurement #	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Reid-Hillview Airport	1		0.163	0.118	0.14	0.049	0.045	0.103	0.132	0.062		0.029	0.001
Reid-Hillview Airport	2		0.066	0.036	0.127	0.048	0.001	0.068	0.003	0.111		0.041	0.028
Reid-Hillview Airport	3		0.127	0.108	0.099	0.024	0.107	0.014	0.001	0.001		0.036	0.025
Reid-Hillview Airport	4		0.089	0.059	0.079	0.015	0.021	0.115	0.113	0.046		0.052	0.028
Reid-Hillview Airport	5		0.065	0.021	0.184	0.196	0.094	0.136	0.001	0.094		0.027	0.02
Reid-Hillview Airport	6		0.073	0.068	0.006	0.036	0.178	0.053	0.003	0.078		0.031	0.014
Reid-Hillview Airport	7		0.122	0.055	0.116	0.088	0.001	0.166	0.001	0.006		0.023	0.022
Reid-Hillview Airport	8		0.122	0.081	0.095	0.171	0.083	0.065	0.048	0.129		0.024	0.001
Reid-Hillview Airport	9		0.094	0.125	0.068	0.004	0.024	0.055	0.002	0.085		0.008	0.012
Reid-Hillview Airport	10		0.109	0.001	0.104	0.112	0.092	0.071	0.057	0.095		0.017	0.011
Reid-Hillview Airport	11		0.003	0.063	0.127	0.049	0.094	0.005	0.009	0.081		0.019	0.001
Reid-Hillview Airport	12		0.081	0.091	0.134	0.019	0.062	0.094	0.103	0.02		0.029	0.001
Reid-Hillview Airport	13		0.1	0.079	0.088	0.082	0.064	0.002	0.004	0.015		0.02	0.025
Reid-Hillview Airport	14		0.076	0.107	0.094	0.097	0.002	0.002	0.01	0.026		0.02	0
Reid-Hillview Airport	15		0.073	0.076	0.08	0.074	0.009	0.093	0.024	0.005		0.013	0.013
Reid-Hillview Airport	16		0.013	0.094	0.005	0.086	0.113	0.025	0.041	0.041		0.03	0.024
Reid-Hillview Airport	17		0.077	0.09	0.077	0.083	0.042	0.091	0.037	0.011		0.001	0.02
Reid-Hillview Airport	18		0.055	0.057	0.098	0.05	0.082	0.169	0.061	0.029		0.014	0.013
Reid-Hillview Airport	19		0.045	0.083	0.103	0.086	0.048	0.132	0.054	0.023		0.025	0.034
Reid-Hillview Airport	20		0.063	0.103	0.118	0.125	0.07	0.086	0.074	0.022		0.02	0.005
Reid-Hillview Airport	21		0.121	0.044	0.107	0.005	0.031	0.054	0.018	0.039		0.015	0.016
Reid-Hillview Airport	22		0.078	0.092	0.058	0.051	0.076	0.062	0.002	0.026		0.015	0.013
Reid-Hillview Airport	23		0.089	0.065	0.045	0.086	0.09	0.034	0.008	0.057		0.013	0.002
Reid-Hillview Airport	24		0.061	0.084	0.125	0.059	0.004	0.034	0.076	0.039		0.006	0.01
Reid-Hillview Airport	25		0.059	0.089	0.058	0.043	0.067	0.061	0.03	0.028		0.017	0.004
Reid-Hillview Airport	26		0.033	0.071	0.078	0.068	0.067	0.07	0.109	0.034	0.076	0.012	0.006
Reid-Hillview Airport	27		0.023	0.041	0.076	0.094	0.062	0.068	0.042	0.042	0.06	0.01	0.017
Reid-Hillview Airport	28		0.087	0.062	0.082	0.045	0.027	0.047	0.032	0.037	0.057	0.013	0.015
Reid-Hillview Airport	29		0.092	0.052	0.066	0.033	0.039	0.048	0.082	0.023	0.053	0.007	0.009
Reid-Hillview Airport	30		0.094	0.08	0.035	0.053	0.107	0.031	0.072	0.018	0.04	0.018	0.019
Reid-Hillview Airport	31		0.057	0.093	0.081	0.027	0.091	0.059	0.039		0.035	0.009	0.02
Reid-Hillview Airport	32		0.033	0.044	0.105	0.035	0.063	0.064	0.055		0.028	0.014	0.02
Reid-Hillview Airport	33		0.024	0.045	0.082	0.058	0.053	0.067	0.031	0.048	0.028	0.028	0.015
Reid-Hillview Airport	34		0.056	0.055	0.054	0.062	0.045	0.027	0.027	0.057	0.026	0.019	
Reid-Hillview Airport	35		0.05	0.043	0.054	0.051	0.006	0.054	0.043	0.071	0.017	0.011	
Reid-Hillview Airport	36		0.065	0.031	0.061	0.027	0.043	0.052	0.063	0.051	0.013	0.013	0.009
Reid-Hillview Airport	37		0.037	0.053	0.082	0.043	0.054	0.079	0.07	0.044	0.013	0.013	0.008
Reid-Hillview Airport	38		0.078	0.087	0.065	0.055	0.086	0.07	0.045	0.032	0.01	0.011	
Reid-Hillview Airport	39		0.05	0.056	0.059	0.042	0.037	0.064	0.061	0.047	0.013	0.011	
Reid-Hillview Airport	40		0.04	0.08	0.044	0.046	0.041	0.06	0.066	0.032	0.012	0.034	
Reid-Hillview Airport	41		0.043	0.043	0.039	0.046	0.062	0.034	0.078	0.046	0.033	0.014	
Reid-Hillview Airport	42		0.072	0.1	0.062	0.067	0.021	0.11	0.095	0.018	0.015	0.013	
Reid-Hillview Airport	43		0.065	0.053	0.067	0.057	0.059	0.048	0.056	0.04	0.019	0.009	
Reid-Hillview Airport	44		0.071	0.069	0.067	0.086	0.061	0.112	0.068	0.049	0.009	0.016	
Reid-Hillview Airport	45		0.096	0.102	0.044	0.099	0.07	0.062	0.078	0.037	0.009	0.019	
Reid-Hillview Airport	46		0.063	0.137	0.044	0.037	0.092	0.017	0.08	0.032	0.015	0.036	
Reid-Hillview Airport	47		0.07	0.083	0.053	0.002	0.099	0.052	0.083	0.062	0.013	0.017	
Reid-Hillview Airport	48		0.056	0.022	0.017	0.109	0.071	0.065	0.041	0.033	0.015	0.022	
Reid-Hillview Airport	49		0.137	0.061	0.041	0.015	0.067	0.059	0.045	0.056	0.017	0.018	
Reid-Hillview Airport	50		0.071	0.089	0.128	0.062	0.103	0.065	0.111	0.019	0.023	0.003	
Reid-Hillview Airport	51		0.113	0.03	0.119	0.078	0.116	0.064	0.071	0.019	0.014	0.014	
Reid-Hillview Airport	52		0.118	0.088	0.061	0.05	0.003	0.091	0.068	0.036	0	0.051	
Reid-Hillview Airport	53		0.116	0.05	0.133	0.004	0.007	0.071	0.131	0.056	0.027	0.009	
Reid-Hillview Airport	54		0.096	0.005	0.076	0.006	0.015	0.027	0.018	0.045	0.02	0.038	
Reid-Hillview Airport	55		0.113	0.164	0.087	0.086	0.102	0.003	0.044	0.027	0.028	0.02	
Reid-Hillview Airport	56		0.111	0.018	0.014	0.086	0.053	0.002	0.002	0.062	0.008	0.003	
Reid-Hillview Airport	57		0.024	0.056	0.124	0.002	0.06	0.028	0.046	0.013	0.063	0.009	
Reid-Hillview Airport	58		0.097	0.005		0.079	0.134	0.063	0.052	0.001	0.027		
Reid-Hillview Airport	59		0.171	0.121		0.066	0.079	0.002	0.005	0.067	0.027		
Reid-Hillview Airport	60		0.095	0.11			0.1	0.077		0.01	0.019		
Reid-Hillview Airport	61		0.155	0.08			0.046	0.054		0.037	0.001		

Average			0.0786229508196721	0.0699672131147541	0.0795614035087719	0.0595593220338983	0.061327868852459	0.0615737704918033	0.0495084745762712	0.0434827586206897	0.0415555555555556	0.0190491803278689	0.0154035087719298
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<b>Median</b>			<b>0.073</b>	<b>0.069</b>	<b>0.078</b>	<b>0.053</b>	<b>0.062</b>	<b>0.062</b>	<b>0.046</b>	<b>0.037</b>	<b>0.042</b>	<b>0.017</b>	<b>0.014</b>
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# 24-hr Average Lead Concentrations : 2012 – 2023



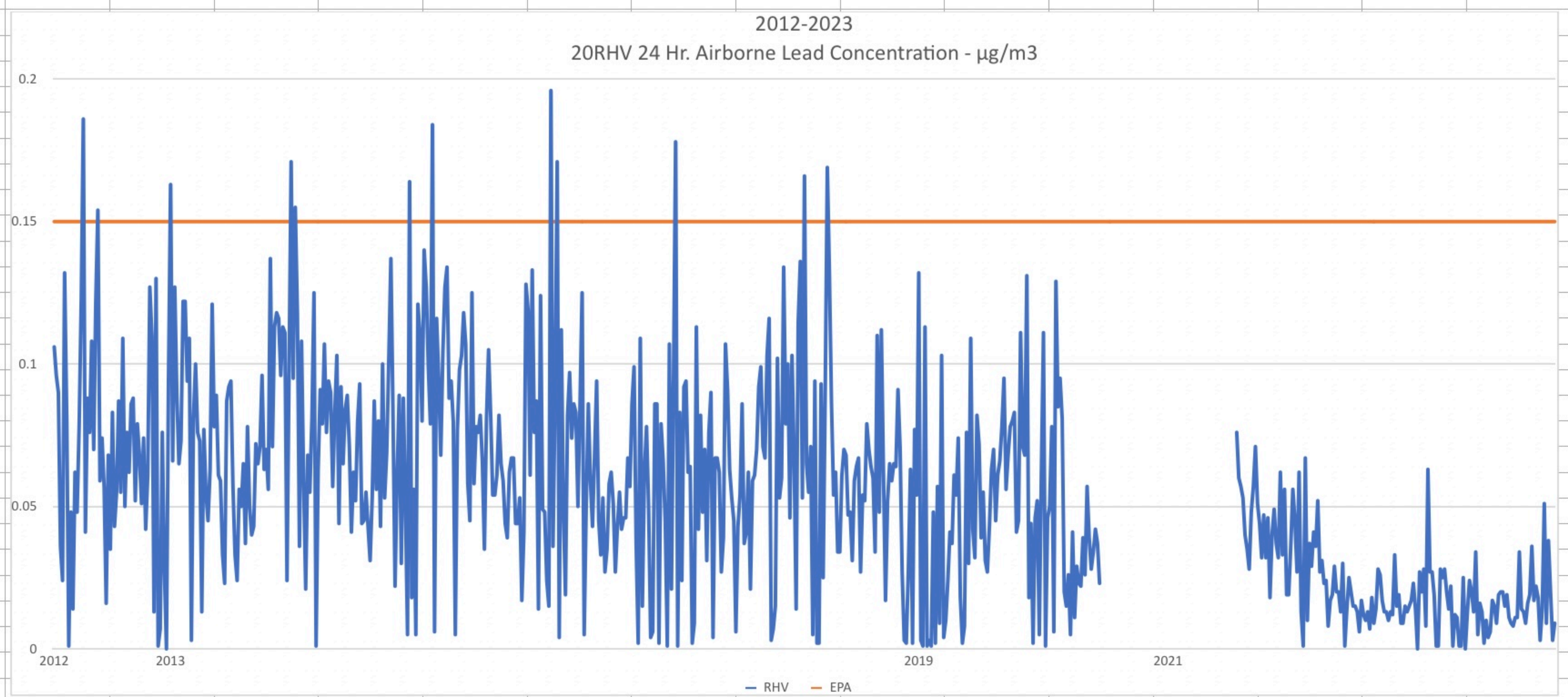


Average/Median of 24 Hr airborne Lead Concentration -  $\mu\text{g}/\text{m}^3$

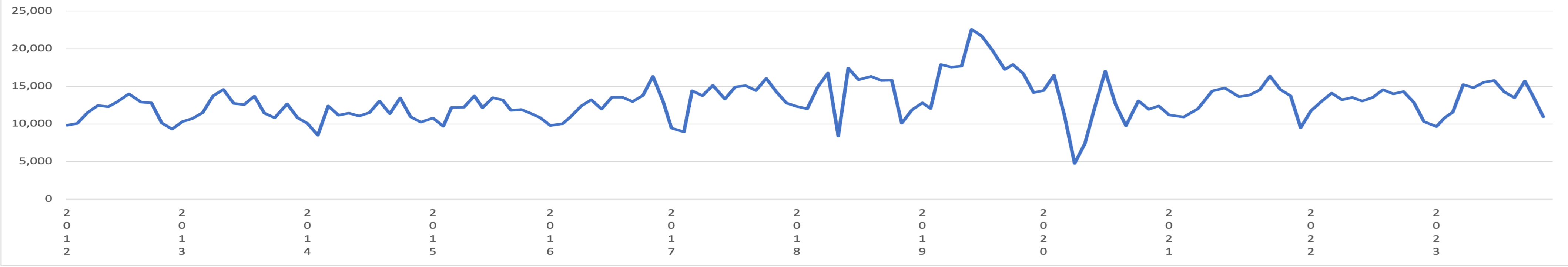




2012-2023  
20RHV 24 Hr. Airborne Lead Concentration -  $\mu\text{g}/\text{m}^3$



Operations



2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2	0	2	0	2	0	2	0	2	0	2	0
1	1	1	1	1	1	1	1	1	2	2	2
2	3	4	5	6	7	8	9	0	1	2	3

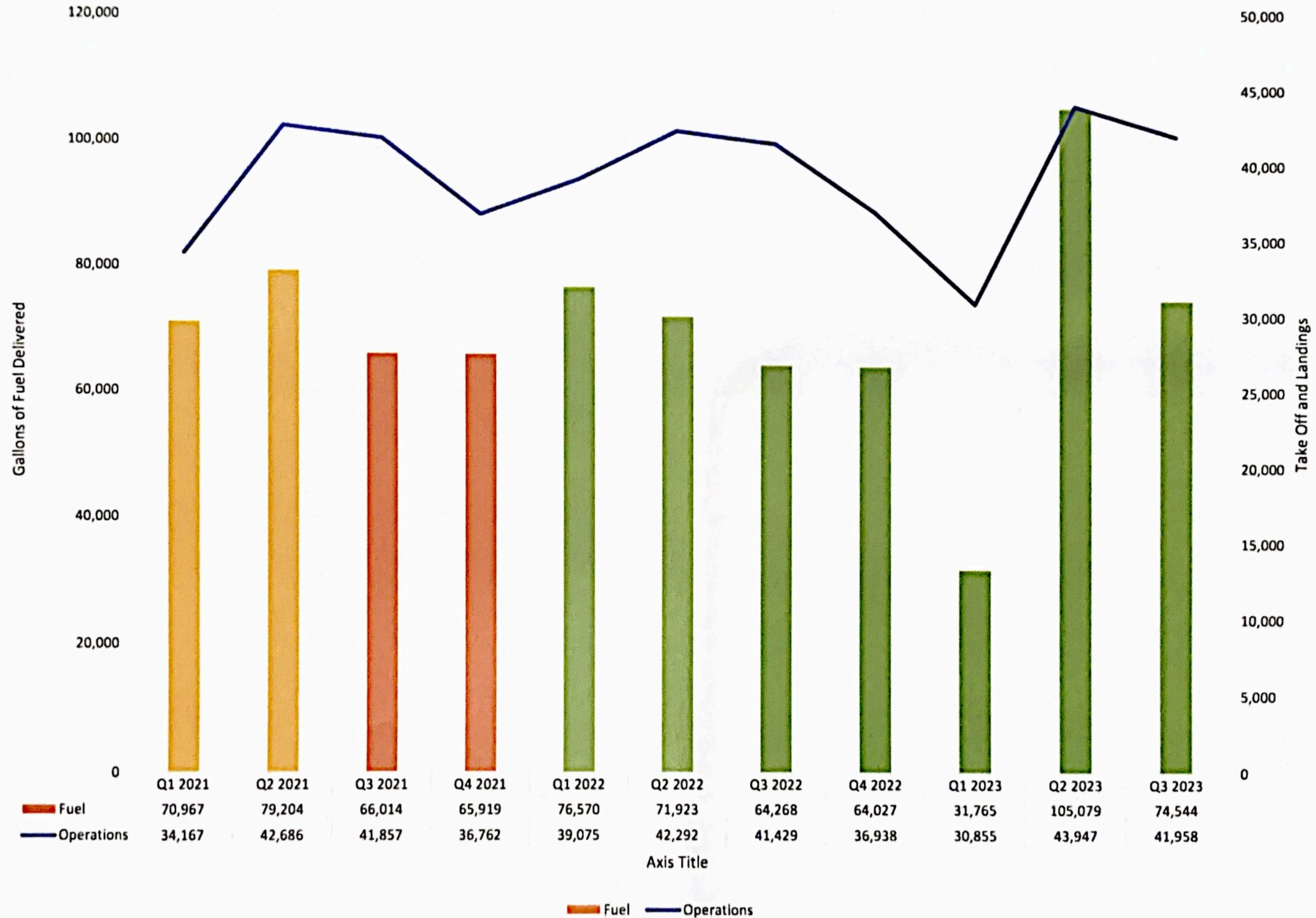


# Reid-Hillview Airport Operations and AvGas Delivery

January to July 2021 are 100LL Fuel

August to December 2021 include both UL94 & 100LL Fuel

2022 and 2023 are only UL94



## Conclusions:

Lead Levels have been declining since mid-2018 - 20 months before the Pandemic and almost 4 years before Unleaded Fuel Sales began. The reason for this is unclear.

Reid Hillview Flight Operations peaked in 2018 at 208,000 but remain close to 160,000 Takeoffs and Landings per Year

Current Airborne Lead Levels are less than one-tenth of EPA Standards