



# PRESENTATION ON STAFF ANALYSIS OF OPTIONS FOR HOME ENVIRONMENTAL TESTING

City Council Meeting  
February 10, 2025



Item 8



# Ongoing Engagement Efforts

Public Health Department

- Los Angeles County Debris Removal Task Force
- Los Angeles County Wildfire Recovery – Health and Social Services Task Force
  - > Environmental Health Impacts Subcommittee
- California Department of Public Health Wildfire Recovery Task Force



# Ongoing Engagement Efforts

## Public Health Department

- Los Angeles County Dept of Public Health is leading post-fire air, soil, and water assessment activities
  - > Coordinate monitoring activities
  - > Discuss gaps
  - > Prioritize assessment activities
  - > Identify additional partners
- The intent is to
  - > Understand what monitoring activities are underway
  - > Provide a regional dashboard to share results of the research studies and other efforts
  - > Engage impacted communities



# Ongoing Engagement Efforts

## Public Health Department

- Two dozen independent studies launched to assess:
  - > Indoor surfaces in homes
  - > Indoor air in homes
  - > Soil in yards
  - > Soil in public spaces
  - > Outdoor settled ash
- Data collection leads
  - > Academic partners
  - > Public agencies such as LA County, AQMD, and Department of Toxic Substances Control
- Full list of known studies is available at
  - > [http://publichealth.lacounty.gov/media/wildfire/post\\_fire\\_assessment\\_plan.htm](http://publichealth.lacounty.gov/media/wildfire/post_fire_assessment_plan.htm)

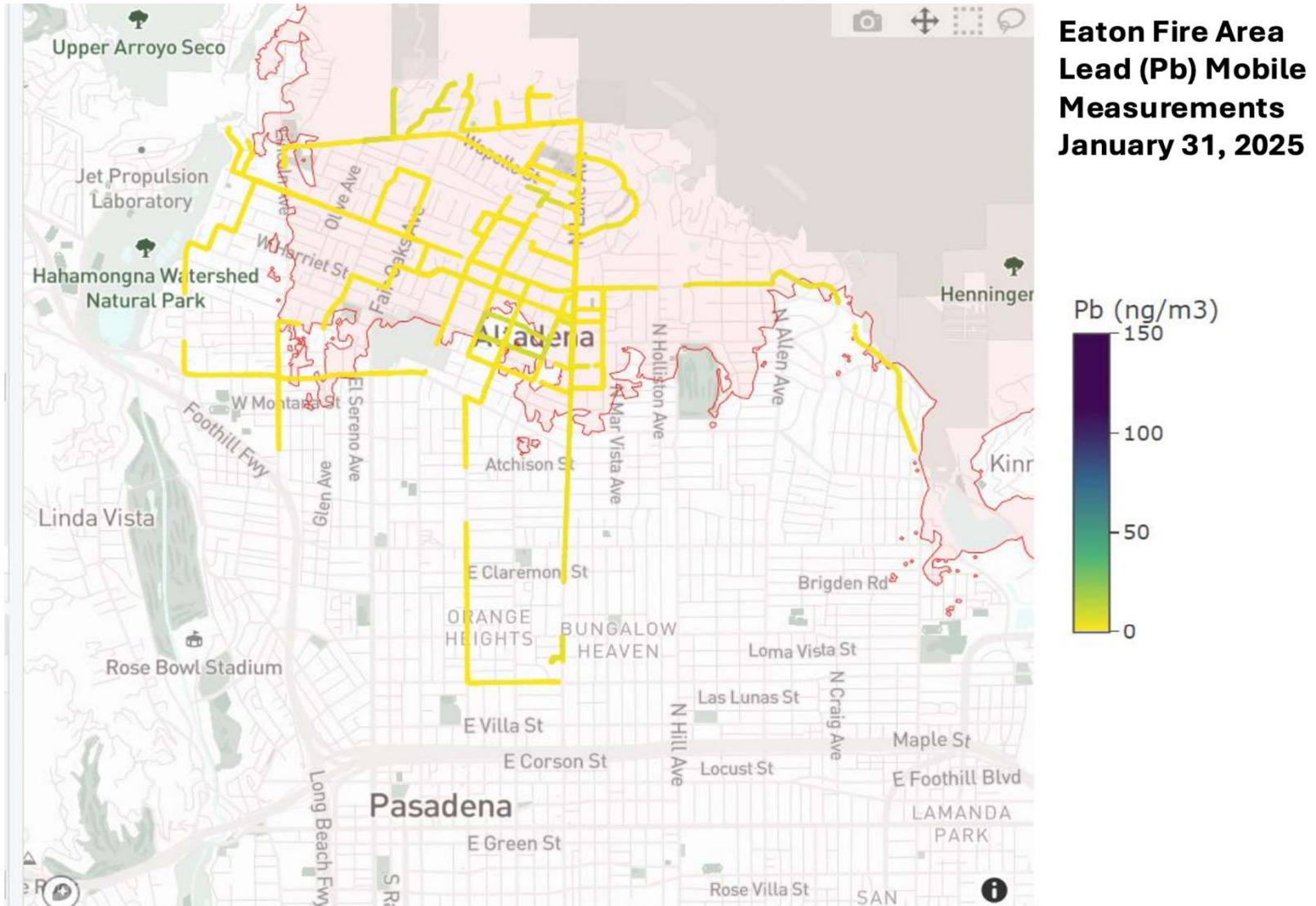


# AQMD Mobile Monitoring

Public Health Department

- January 31 mobile survey conducted in the Eaton Fire area near cleanup and re-populated zones
  - > Measured for air toxic metals and volatile organic compounds (VOCs)
  - > Survey captures a snapshot in time
  - > Used to identify pollutant hotspots and help identify stationary monitoring sites
- Results show no elevated levels of:
  - > Air toxic metals including lead and arsenic
  - > VOCs including benzene

# Lead



**Figure 1.** Map shows concentrations of Lead (Pb) measured on January 31, 2025. Results were well below the federal standard for this pollutant (150 ng/m<sup>3</sup>).

<https://www.aqmd.gov/2025-wildfire-response>





# CA Dept of Toxic Substances Control

Public Health Department

- On February 7, PPHD connected with California Department of Toxic Substances Control (DTSC) staff
- DTSC is coordinating soil testing at sensitive sites throughout the region, such as schools and potentially parks
- Testing is being planned, no additional information is available at this time



# Cleaning Removes Contaminants

Public Health Department

- Cleaning is highly recommended before testing
- Caltech study demonstrated cleaning removed up to 90% of contaminants
  - > Must wear personal protective equipment (tight-fitting mask, goggles, gloves)
  - > Use wet methods for cleaning
    - Mist surfaces and wipe
    - Gently sweep floors and wet mop
- \$300 in FEMA assistance is available for cleanup
- Use air purifiers & open windows when outdoor air quality allows
- Contact a professional when needed

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# City Council Direction to Staff

Public Health Department

“Return to City Council with the best plan for timely additional testing for the public to be able to assess environmental factors to assist residents in understanding the safety of homes within the City”



# Intent Based on Direction

Public Health Department

- Seek improved access to indoor environmental testing for Pasadena homes
- Focus on wildfire-related environmental hazards that pose the most significant threats to human health
- Encourage residents to share test results publicly for the benefit of the broader community
- Use available data to inform future city decision-making about environmental assessment



# Legal Considerations

Public Health Department

- Legal considerations involved in City's coordination of home testing
  - > Scope of agreement required to enter premises (right-of-entry) for testing and for results to be shared publicly
  - > Evaluation of City liability and scope of waiver to third party testing
  - > Public disclosure of test results indicating detection of hazards (i.e. positive test) may impact property value potentially leading to challenges to the test results and other disputes



# Potential Testing Process

Public Health Department

- Test for most hazardous toxic substances
  - > Lead is a heavy metal entering the body primarily through inhalation of dust or ingestion in contaminated food, water, or soil
  - > Asbestos is a fiber entering the body primarily through inhalation
  - > Benzene is a chemical that can be absorbed by materials such as drywall and off-gas for days or weeks
- EPA has determined no household level is considered safe for any of these substances
- Determining “habitability” of homes would be fact-specific determination made by a court of law



# Potential Testing Process

Public Health Department

- Asbestos fibers and dust with lead settle in undisturbed homes
  - > For homes with no activity, surface level testing may be effective
- In homes where there is frequent activity, asbestos fibers and dust with lead can remain suspended in air
  - > For homes with frequent activity, air testing may be effective



# Potential Testing Process

## Public Health Department

- Professional consultants conduct an inspection of each home before prescribing level of testing and testing procedures
- Relevant guidance for developing protocols on home testing is not available to the City
- Questions that need resolution
  - > Are more samples needed as square footage of homes increases?
  - > Where in the home should samples be collected?
  - > How many samples should be collected per room?
  - > Can data from testing be used in determinations of “habitability”? How and by who?
  - > If there is a positive test, how is remediation and retesting handled? What restrictions on “habitability” would result?
- Further discussion is needed with professional consultants



# Additional Potential Toxins

Public Health Department

- Depending on a variety of factors (extreme smoke damage in the home, proximity to burned commercial or industrial structures, strong chemical odors, etc.), additional testing may be warranted for:
  - > Polycyclic aromatic hydrocarbons (PAHs)
  - > Other volatile organic compounds (VOCs)
  - > Heavy metals such as mercury and arsenic
  - > Hazardous air pollutants (HAPs) including dioxins and furans





# Consultants

## Public Health Department

- City can share list of certifications and qualifications that can help guide residents in the selection of a consultant for home testing
- Pasadena Public Health Department does not have capability to conduct home testing program
  - > Department does not operate an environmental monitoring or testing program
  - > Department does not possess the required equipment, testing supplies, or access to certified laboratory
  - > No staff have certifications to conduct testing



# Range of Estimated Costs per Home

Public Health Department

- Range of consultant costs based on square footage, number of rooms, and amount of human activity in home
  - > Home with no activity: Between \$3K to \$5K, per home
    - Lead surface wipe
    - Asbestos surface wipe
    - Benzene air testing
    - Inspection and documentation
  - > Home with activity: Between \$2K to \$4K, per home
    - Lead surface wipe
    - Asbestos air testing
    - Benzene air testing
    - Inspection and documentation

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# Policy Questions

## Public Health Department

- **Sample Size**

- > **Questions**

- If a City sponsored program is desired, how many homes should be tested citywide?
    - Is there a minimum number of homes that should be tested per council district?

- **Eligibility**

- > **Questions**

- What criteria should be considered for accessing any city coordinated testing?
    - Are there any segments of the population that should be prioritized (i.e. families with children, those with medical conditions, older adults)?



# Potential Staffing Needs

Public Health Department

- Depending on City Council direction, PPHD may need additional staffing to facilitate any desired city efforts in addition to any testing costs which City Council wishes to incur



# Current Efforts

## Public Health Department

- Upcoming testing of 9 city facilities for lead and asbestos
  - > Safety Office conducted air quality testing before reopening and all facilities were cleared
  - > No evidence that any hazards are present
  - > Goals of testing
    - Confirm the facilities are safe for public and staff
    - Provide baseline environmental data to share with the public

### **City facilities to be tested:**

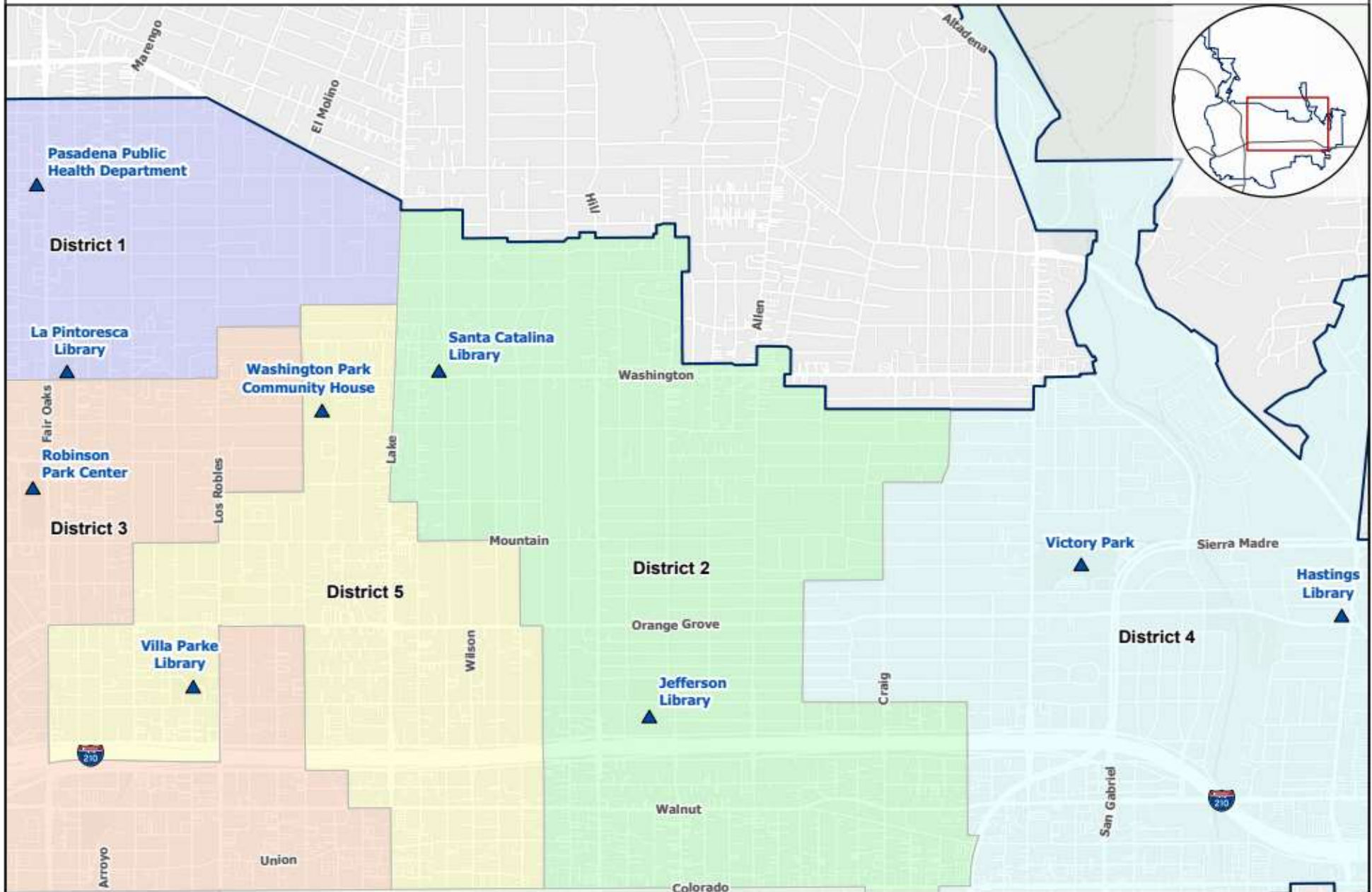
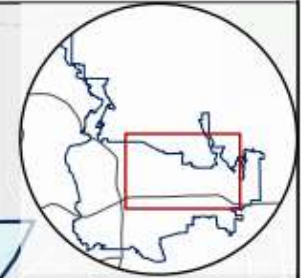
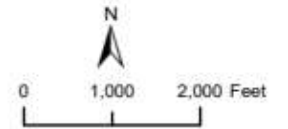
1. Pasadena Public Health
2. Hastings Library
3. Victory Park
4. Santa Catalina Library
5. Jefferson Library
6. La Pintoresca Library
7. Robinson Park Recreation Center
8. Villa Parke Community Ctr
9. Washington Park Community House



# Pasadena City Facilities

## Legend

- ▲ Environmental Testing Locations
- ▭ City Boundary
- # Council Districts





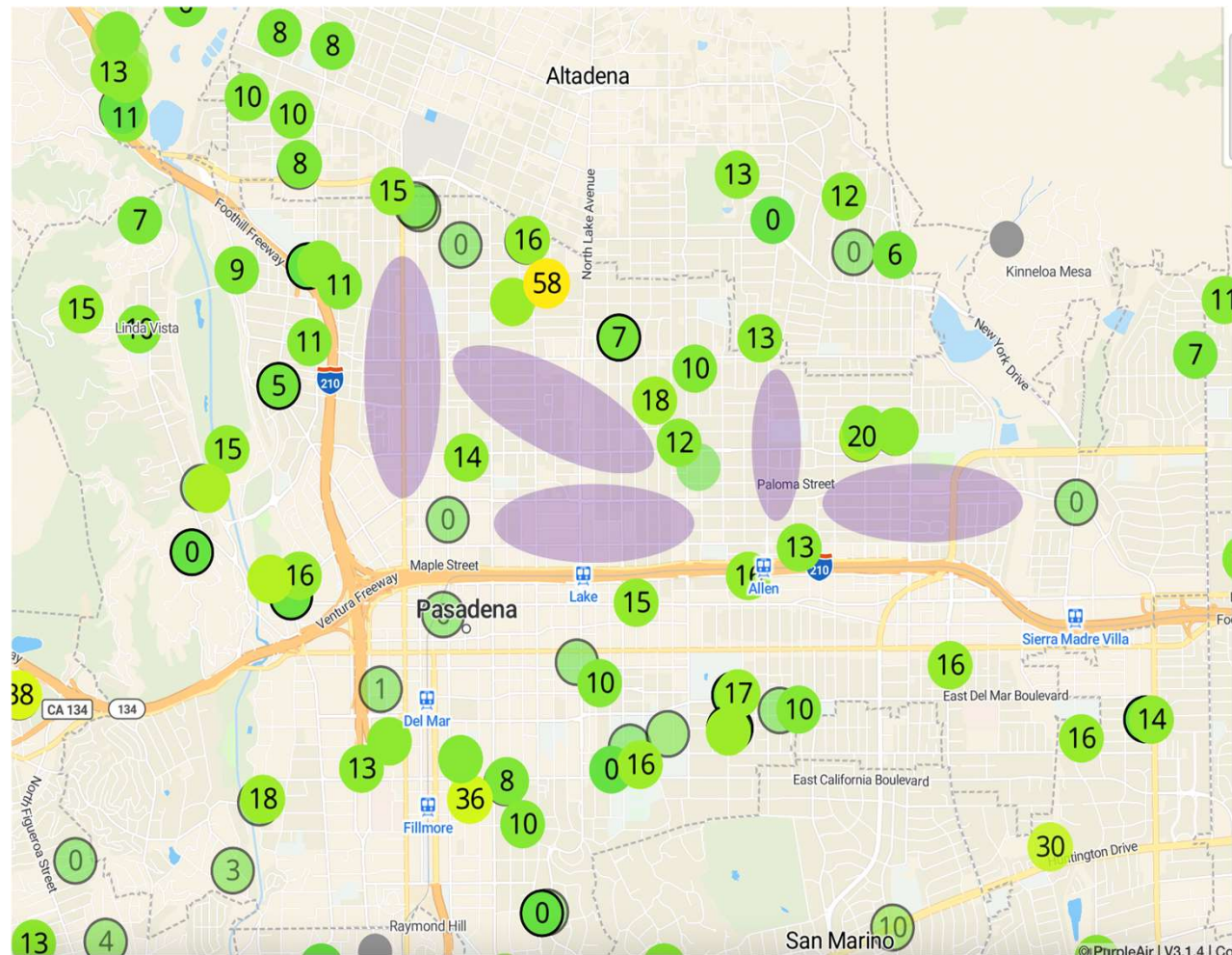


# Current Efforts

Public Health Department

- Focus new sensors on gaps in PurpleAir network
- In addition, City is partnering with others to deploy air quality sensors for research purposes

Snapshot taken of PurpleAir website 7:30am 2/9/25



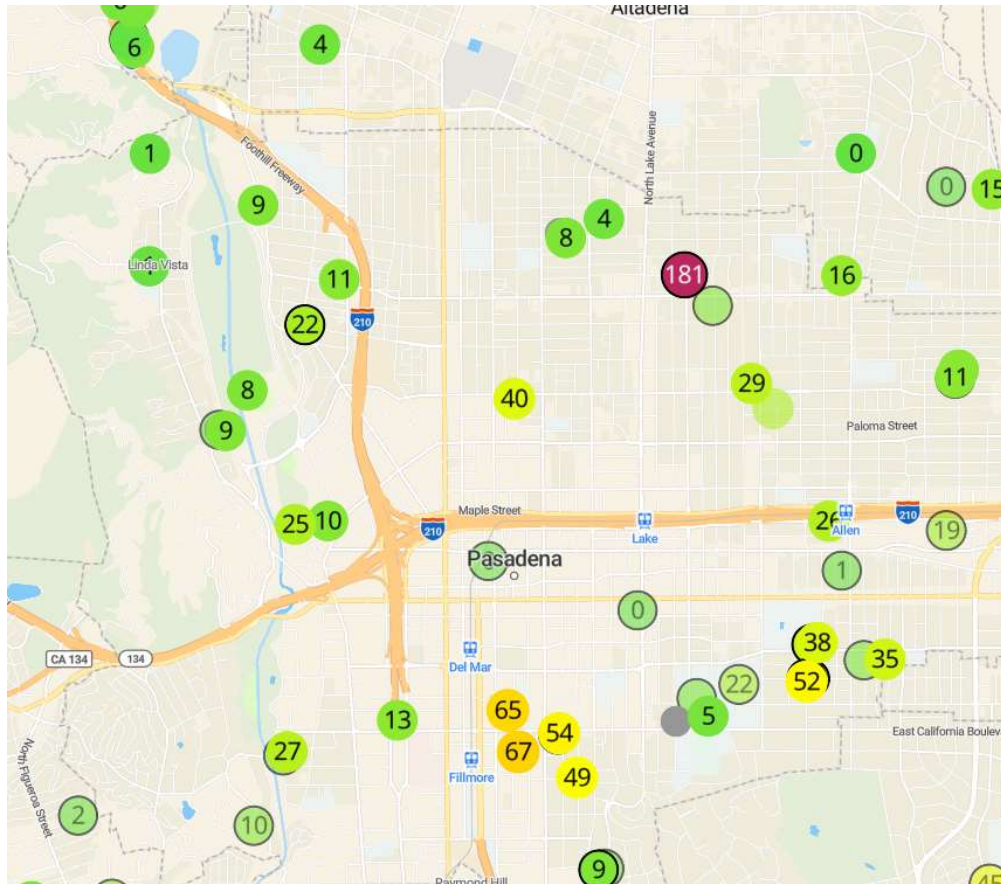
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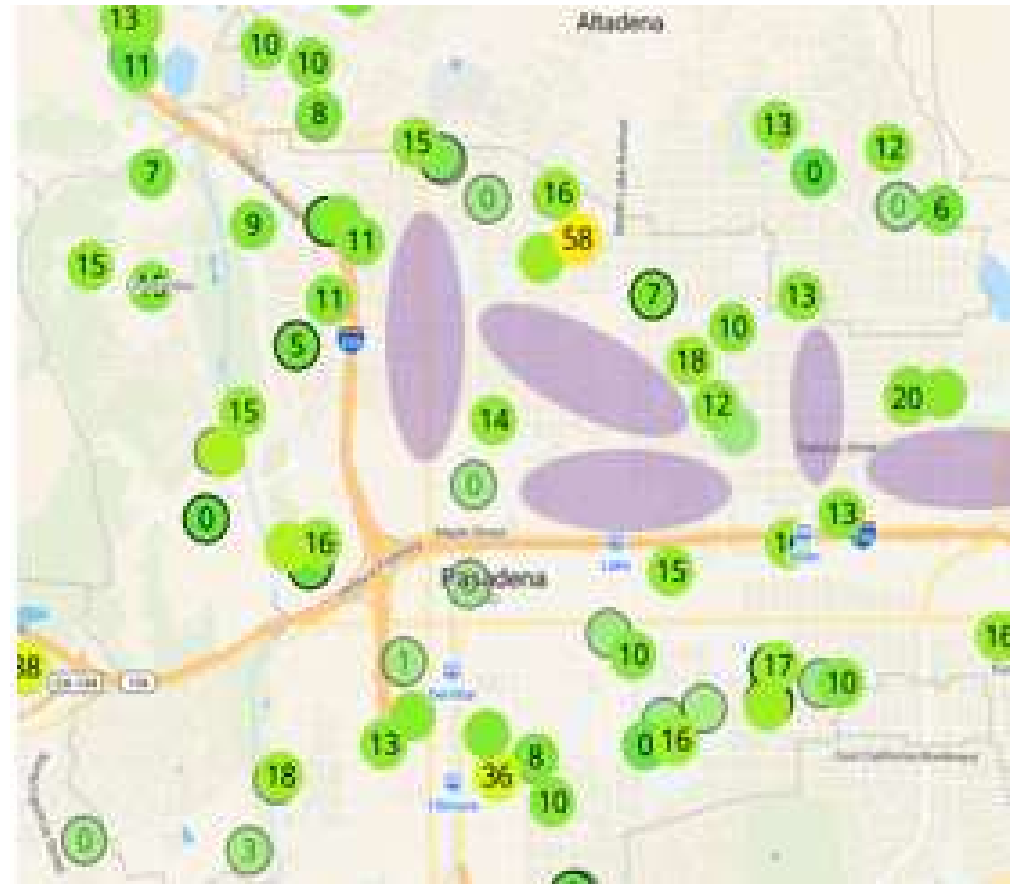


# Increase in Use of PurpleAir

Public Health Department



Screenshot taken at 8pm 1/22/25



Screenshot taken at 7:30am 2/9/25



# Current Efforts

## Public Health Department

- PPHD reached out to philanthropic organizations to request information about any initiatives that can support home testing
- Responses received so far
  - > They don't offer financial support for home testing
  - > They are unaware of other philanthropic efforts to fund home testing
- Awaiting others to respond



# Best City Paths for Home Testing

Public Health Department

- Private engagement of certified professionals
  - > Resident pays for service directly
  - > Through insurance, if available
- *Reach out to academic partners to request they expand or launch new efforts to support Pasadena needs*
- Engage philanthropy to request direct financial support for residents to support home testing
- City-coordinated home testing using a third-party vendor is not recommended due to procedural, legal, and financial challenges