



# Community Meeting

## Update: Environmental Sampling in the City Terrace Community



Confidential Attorney-Client Privileged – DRAFT 5.8.23

# Meeting goals

- **Review of County efforts, including the latest sampling results in City Terrace**
- **Learn about air quality improvement steps underway**
  - **South Coast Air Quality Management District (AQMD)**
  - **California Air Resources Board (CARB)**
- **We also want to hear from you**



# Background: Environmental Sampling in the City Terrace Community



# Why did the County conduct environmental sampling?

In 2019, Supervisor Hilda Solis directed the County, through a Board motion, to:

- Expedite the installation of a landfill gas extraction system at the Cogen Landfill.
- Evaluate potential health risks to residents living near the Cogen Landfill (accomplished through environmental sampling).



# What was the community sampling area?

The sampling area was identified as the western portion of the former Cogen Landfill (along Sheriff Road) and properties within 1,000 feet of the landfill.



# How many properties were sampled?

- Of 152 households asked, 29 agreed to outdoor sampling on their properties.
- From August through September 2021, outdoor soil vapor and air samples were collected.



# What were the 2021 sampling results?

- Methane, commonly associated with landfills, was not found in community soil vapor samples - except for one detection, close to the landfill border at a low level.
- Benzene was detected in the outside soil vapor of the 29 properties sampled at levels that do not generally pose a health risk.
- However, additional sampling was needed to assess if benzene from the soil vapor was entering the homes.



# Update: Recent Environmental Sampling in the City Terrace Community

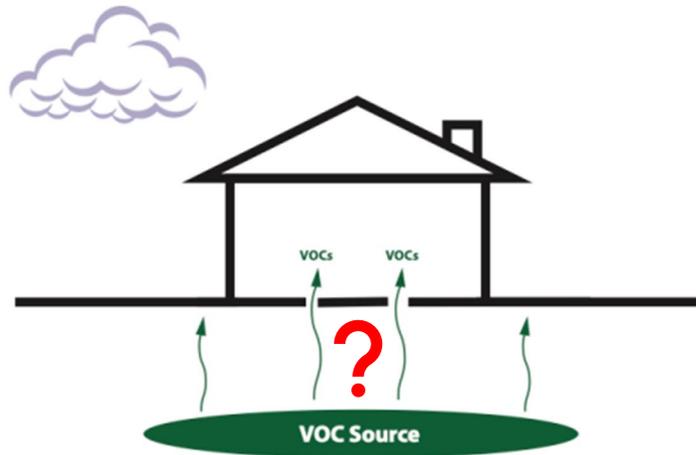


# Why was a second round of sampling conducted in 2023?

A second round of sampling was conducted in 2023 to:

- Assess if benzene, or other chemicals, are still found in the soil vapor outside the homes.
- Determine if the chemicals found in the soil vapor appear to be entering homes.
- Evaluate whether benzene is present in the indoor air of the homes, and if so, calculate the associated health risk.

Vapor Intrusion — Conceptual Model



# What type of sampling was performed?

- Soil Gas



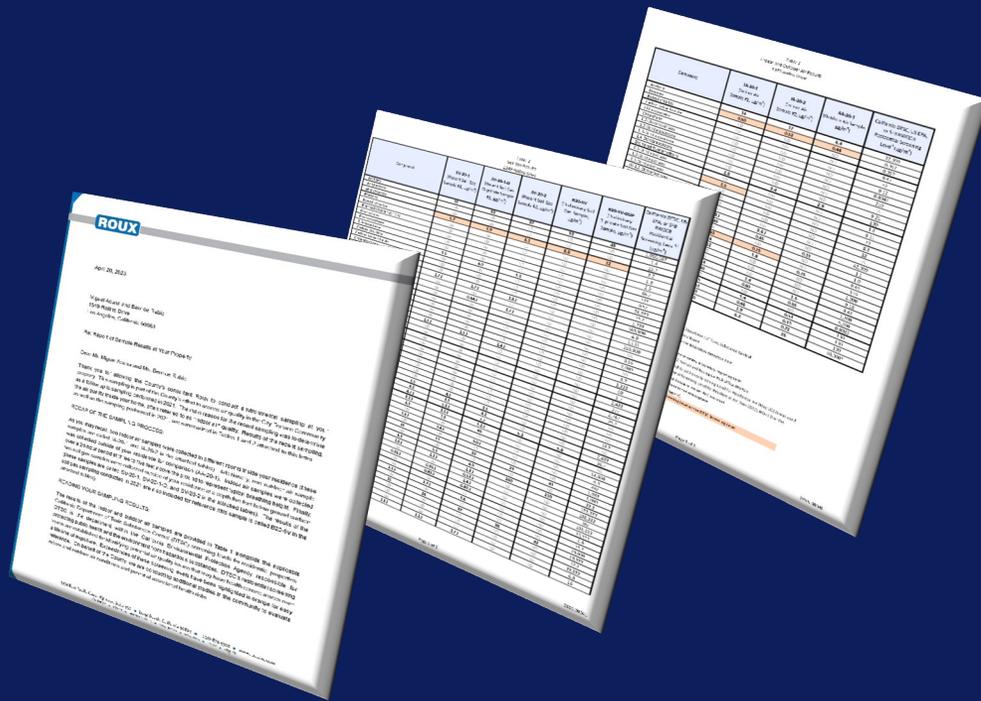
- Outdoor (Ambient) Air



- Indoor Air



# What were the 2023 sampling results?

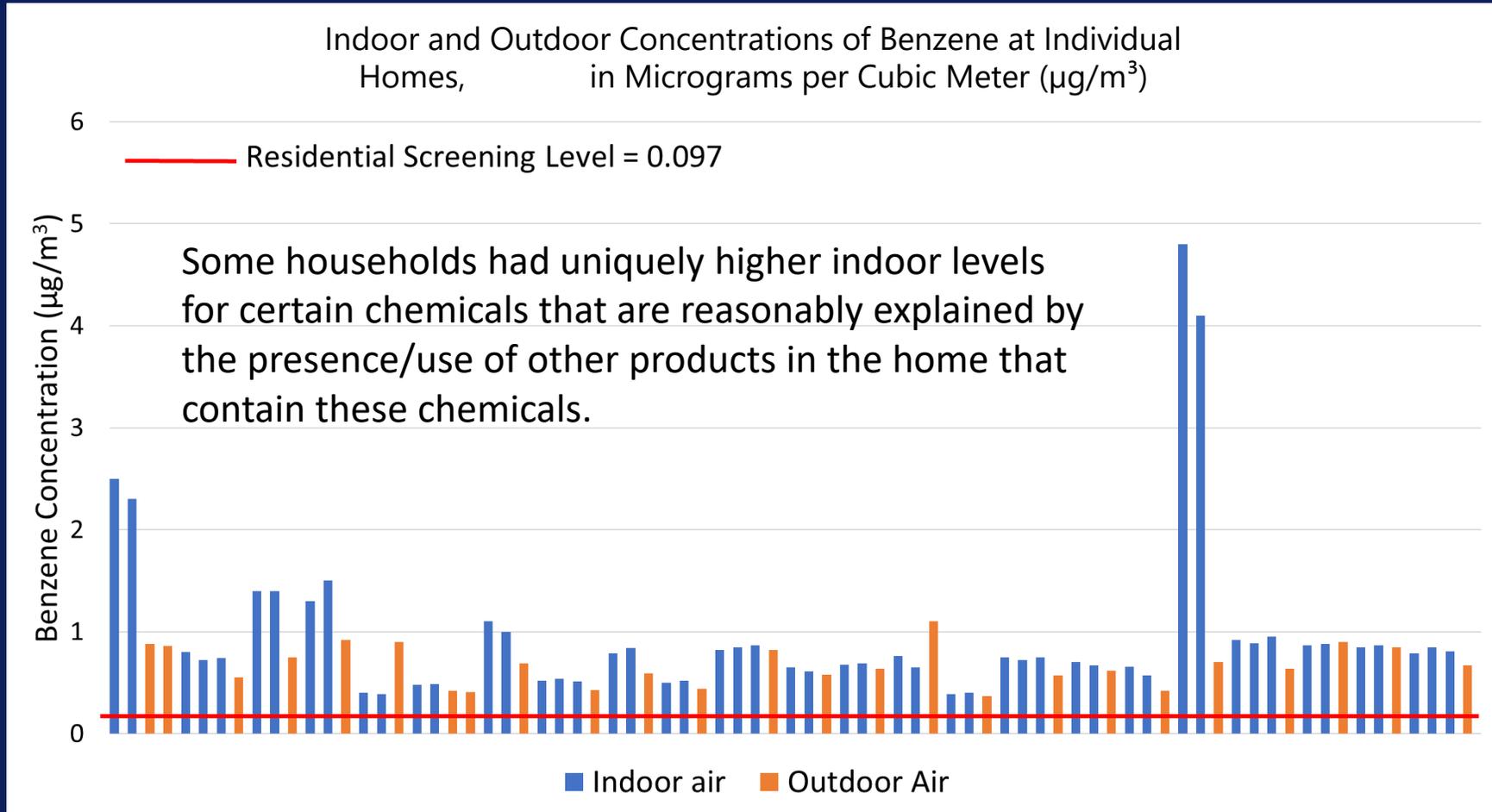


- 23 of 29 households whose properties that were previously sampled agreed to the additional sampling.
- Individual sampling results were provided to all households, and in-person meetings were held with all who wanted to meet.
- Project staff will continue to follow-up with residents and be available to answer questions about individual sampling results.



# City Terrace Neighborhood – Individual benzene results from 2023 indoor and outdoor air samples

- Benzene concentrations in indoor and outdoor air exceeded residential screening levels at all locations.
- Outdoor air had similar levels of benzene as indoor air.
- None of the households appear to have indoor air quality issues associated with soil vapor.



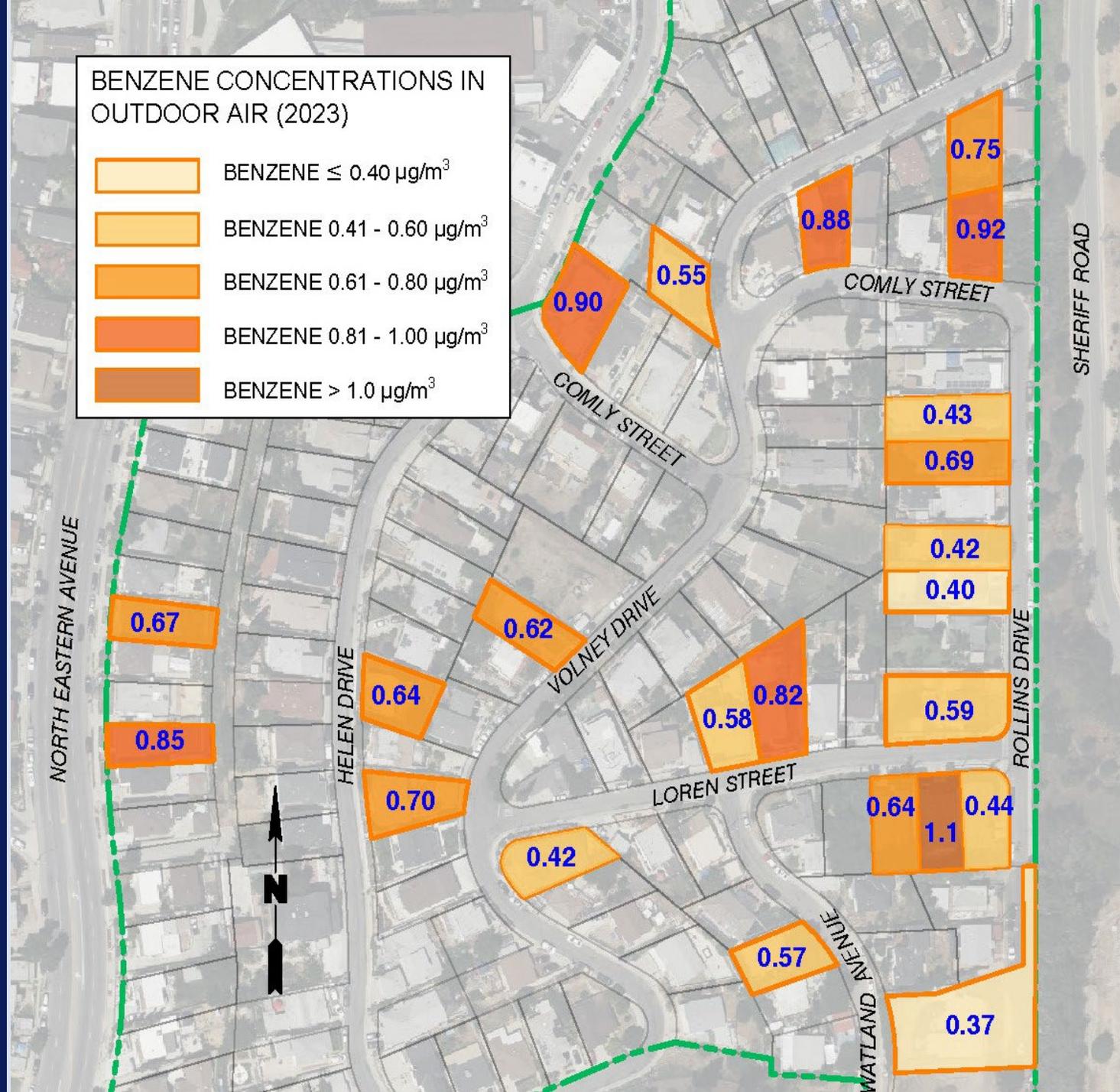
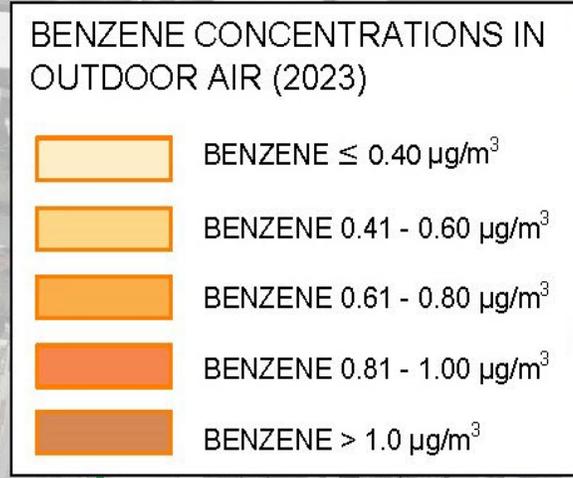
# 2023 indoor sampling results

- Some households had uniquely higher indoor levels for certain chemicals that are reasonably explained by the presence/use of other products in the home that contain these chemicals, including the examples depicted below.



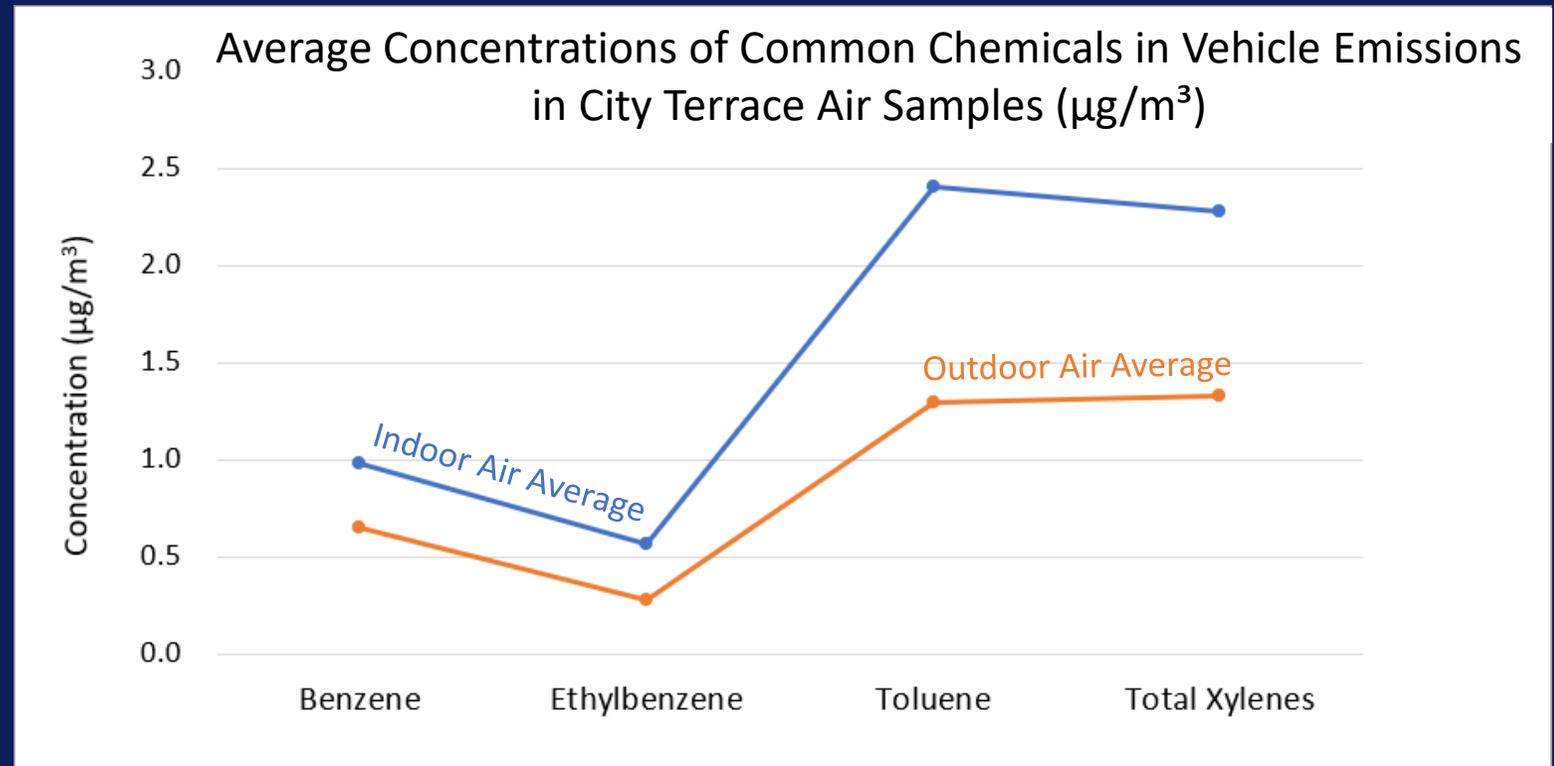
# 2023 outdoor sampling results

No clear pattern in outdoor benzene levels that point to a specific neighborhood source.



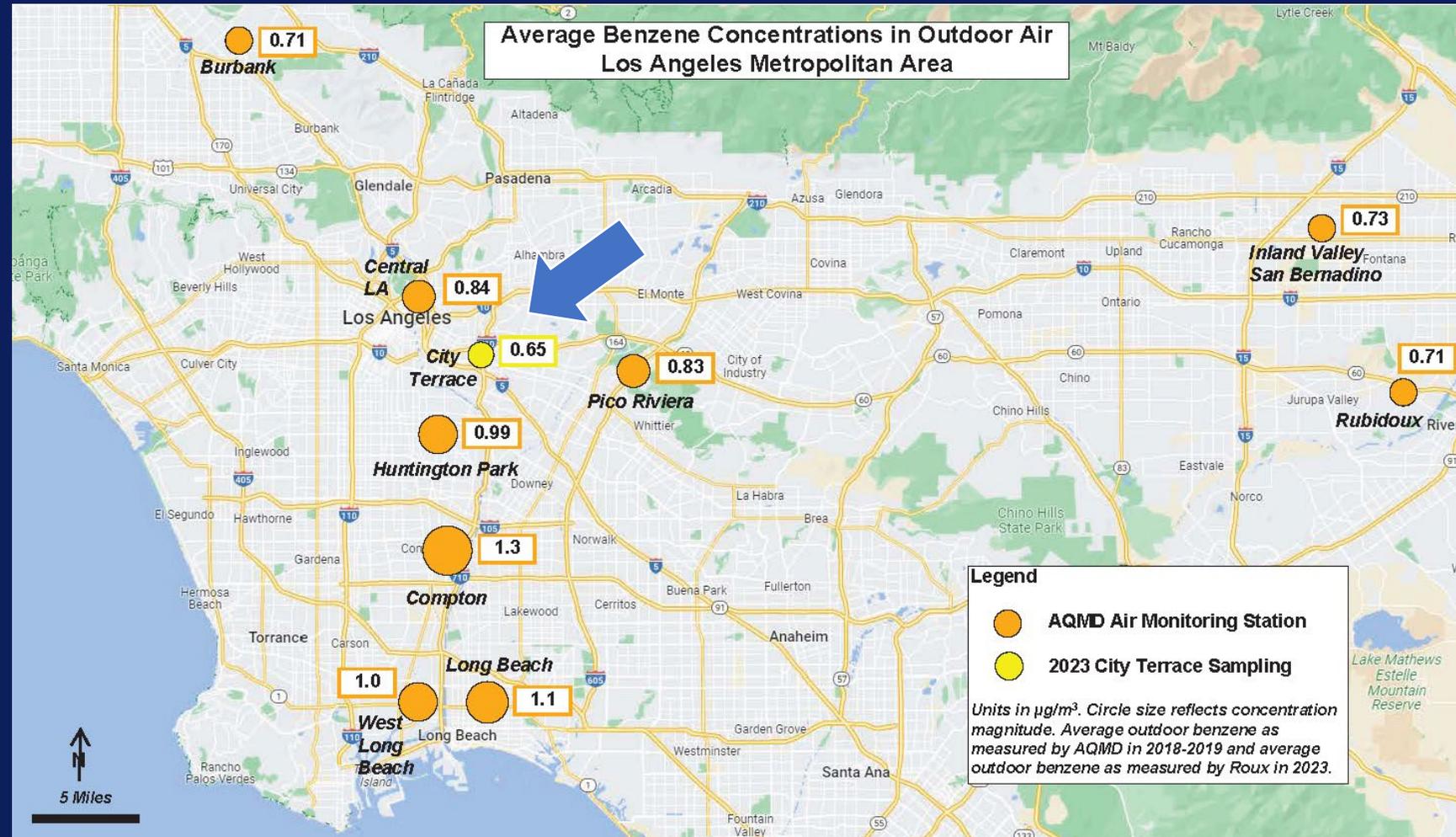
# Where is the benzene coming from?

- Common chemicals in vehicle emissions are benzene, toluene, ethylbenzene and xylenes (BTEX).
- Both indoor and outdoor air had a similar pattern of BTEX.
- These BTEX patterns suggest the benzene is primarily from vehicle emissions.



# What are the typical benzene levels in Los Angeles?

- Throughout Los Angeles County, benzene outdoor air concentrations are above indoor residential screening levels.



# What are the health risks?

- The numbers presented here are known as additional or incremental risk. These risk numbers would be added to the baseline risk of experiencing cancer.

- We conducted a Human Health Screening Evaluation (HHSE), which is a calculation of additional cancer risk levels for a specified exposure.
- Depending on the day, outdoor air risk levels ranged from 4- to 10 excess cases in-one-million, consistent with risk levels across LA County.
- Individual residence indoor risk levels ranged from 4- to 700 excess cases in-one-million. The larger indoor range is a result of the chemical sources found in individual homes.
- Benzene was the primary risk driver in the calculation; however, the HHSE considered all detections of chemicals when calculating risk.



# Benzene source study

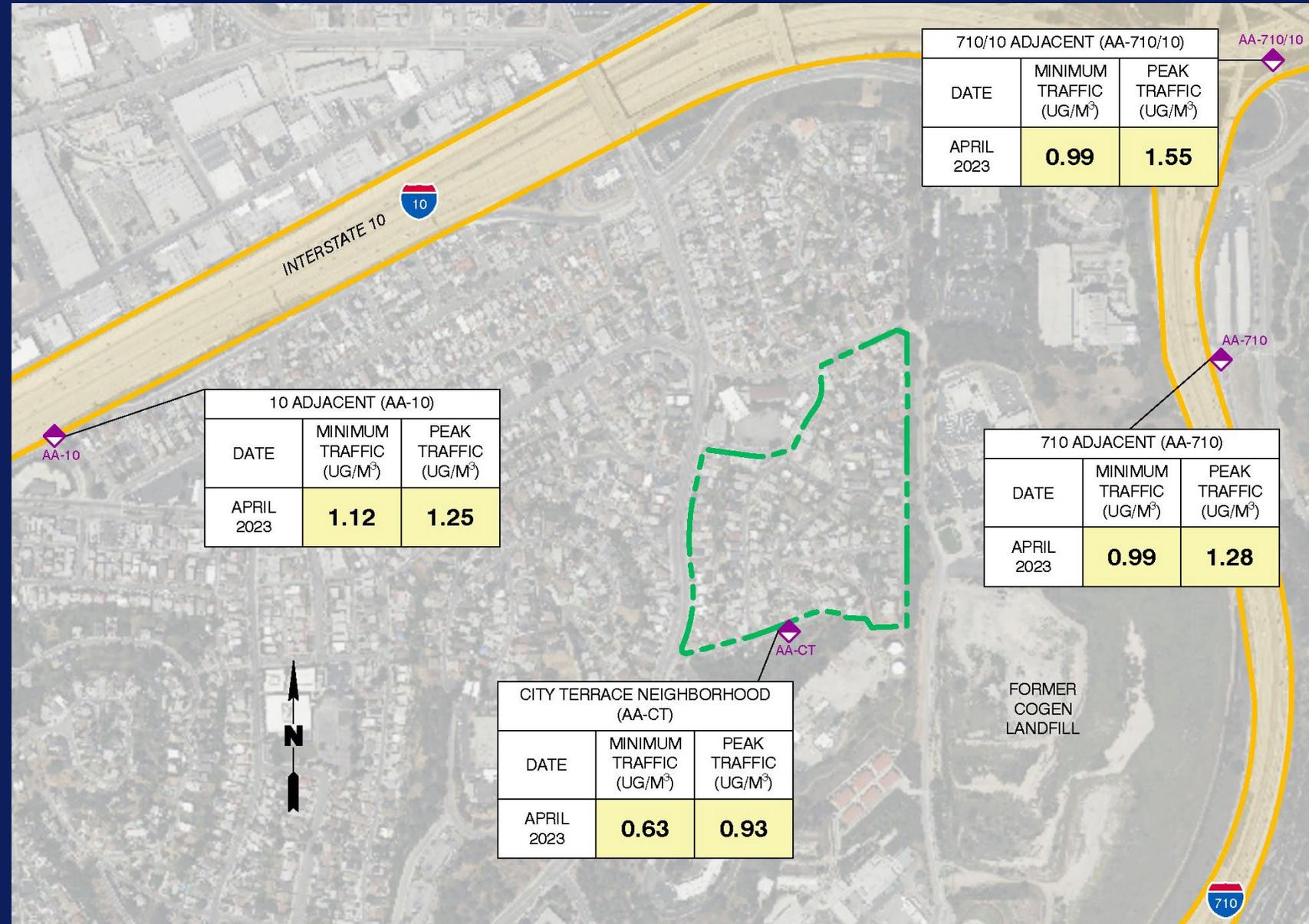
While this preliminary assessment suggests the benzene in outdoor and indoor air was primarily vehicle emissions related, additional study is underway to further investigate potential sources of benzene contributing to the outdoor air quality in this community including local:

- Freeways
- Landfill properties
- Gas stations



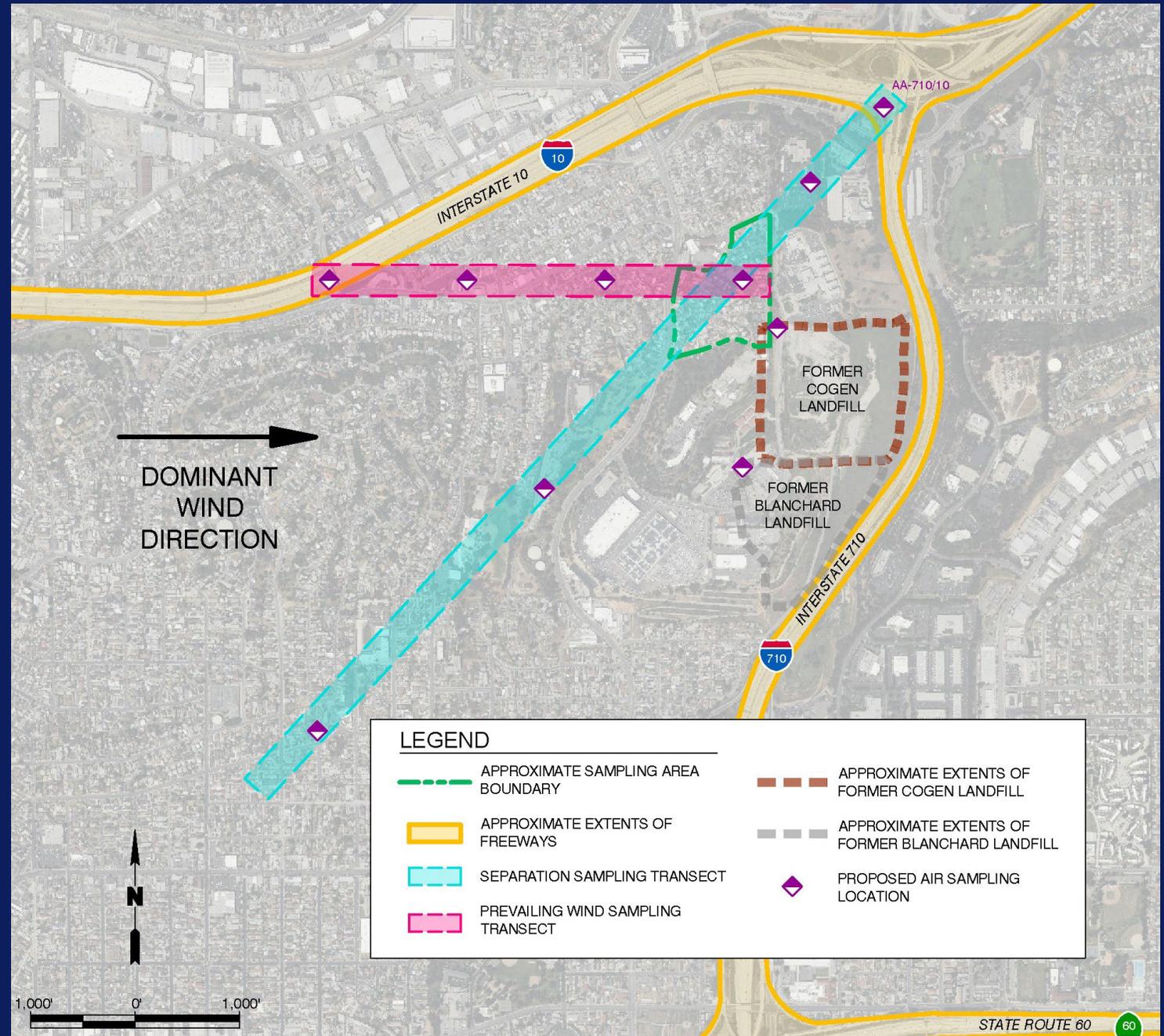
# Benzene source study: preliminary data

- Benzene in outdoor air is generally lower overnight when traffic is low.
- Average benzene concentration in outdoor air near the freeway decrease approximately 38% overnight compared to peak levels during rush hour.
- Community outdoor air similarly decreases overnight as traffic decreases, suggesting vehicle emissions are affecting community outdoor air quality.



# Benzene source study: preliminary data

- The benzene concentrations are fairly uniform across the community, which suggests the benzene is primarily from regional transportation sources.
- Benzene in outdoor air does not appear to be coming from the landfill.



# Summary

- The indoor and outdoor air quality in the community is not the result of the soil gas.
- There are no known landfill impacts through the soil into the community.
- Outdoor air quality is primarily affecting the indoor quality in the community, resulting in benzene levels above indoor residential screening levels throughout.
- Vehicle emissions from regional transportation is the primary source of benzene concentrations in indoor and outdoor air above residential screening levels.



# Q&A



# Facilitated Discussion



# For additional information

- **Los Angeles County Department of Public Health**

- Call **(626) 430-9820**, M-F 8:00 a.m. - 5:00 p.m.
- After-hours, leave a message at **(626) 430-9821** and someone will get back to you.
- Email [DPH-OEJCH@ph.lacounty.gov](mailto:DPH-OEJCH@ph.lacounty.gov)[publichealth.lacounty.gov/city\\_terrace](http://publichealth.lacounty.gov/city_terrace)

- **South Coast Air Quality Management District (AQMD)**

- Call **(909) 396-2000**
- Email [webinquiry@aqmd.gov](mailto:webinquiry@aqmd.gov)
- Community Emissions Reduction Plan (CERP) for East Los Angeles, Boyle Heights, West Commerce: <https://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/east-la/cerp/carb-submittal/final-cerp.pdf?sfvrsn=8>

- **California Air Resources Board (CARB)**

- Call **(800) END-SMOG/ (800) 363-7664**
- Email [helpline@arb.ca.gov](mailto:helpline@arb.ca.gov)
- California Air Resources Board, East Los Angeles, Boyle Heights, West Commerce CERP Staff Report: [https://ww2.arb.ca.gov/sites/default/files/2020-02/2020\\_02-24\\_ELA\\_CERP\\_Staff\\_Report\\_finalversion.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-02/2020_02-24_ELA_CERP_Staff_Report_finalversion.pdf)

