



POMONA SENSOR LIBRARY PROJECT

Community Workshop | May 12, 2026
Taller Comunitaria | 12 de mayo, 2026

Welcome & Housekeeping Items

Bienvenidos y asuntos generales

Agenda

6:10 pm – 6:20 pm

Presentation
Presentacion

6:20 pm – 6:35 pm

Roundtable Discussions
Grupos de Discusión

6:35 pm – 6:50 pm

Share Out & Questions
Compartir y preguntas

6:50 pm – 7:00 pm

Next Steps & Close-out
Próximos pasos y cierre

Project Team

Equipo del proyecto



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Project Introduction

Introducción del Proyecto

What is the Pomona Sensor Library Project?

¿Qué es el proyecto Pomona Sensor Library?

Community-based air quality monitoring initiative

Provides free, loanable air sensors to residents and organizations

- Part of South Coast AQMD's Sensor Library Program

Iniciativa comunitaria de control de la calidad del aire

Ofrece sensores de aire gratuitos y en préstamo a residentes y organizaciones

- *Forma parte del Programa de Biblioteca de Sensores de la AQMD de la Costa Sur*
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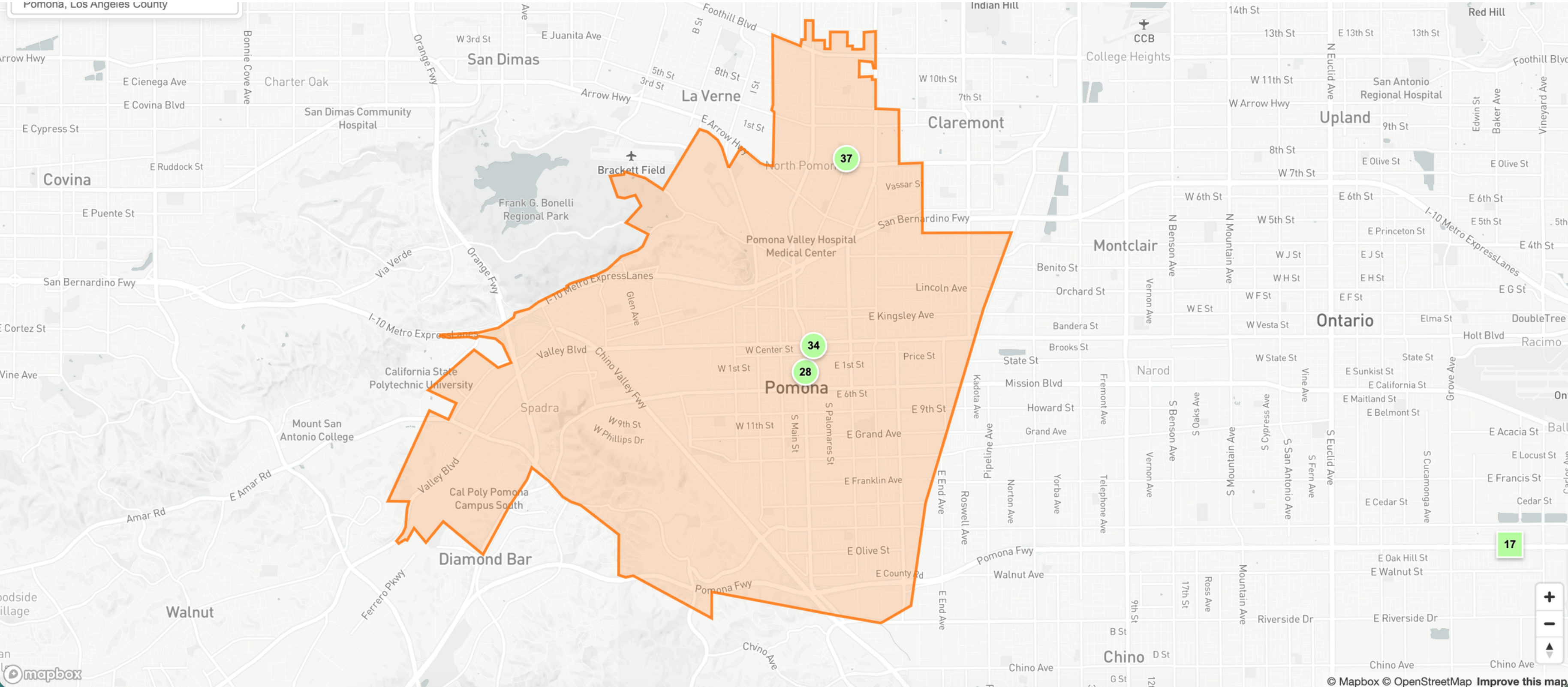
Project Goals

Qué Lograremos

- Increase access to local air quality data
 - Build community awareness + education
 - Support environmental justice efforts in Pomona
 - Empower residents to take action using data
- *Mejorar el acceso a los datos sobre la calidad del aire a nivel local*
 - *Fomentar la concienciación y la educación de la comunidad*
 - *Apoyar las iniciativas de justicia medioambiental en Pomona*
 - *Capacitar a los residentes para que actúen basándose en los datos*

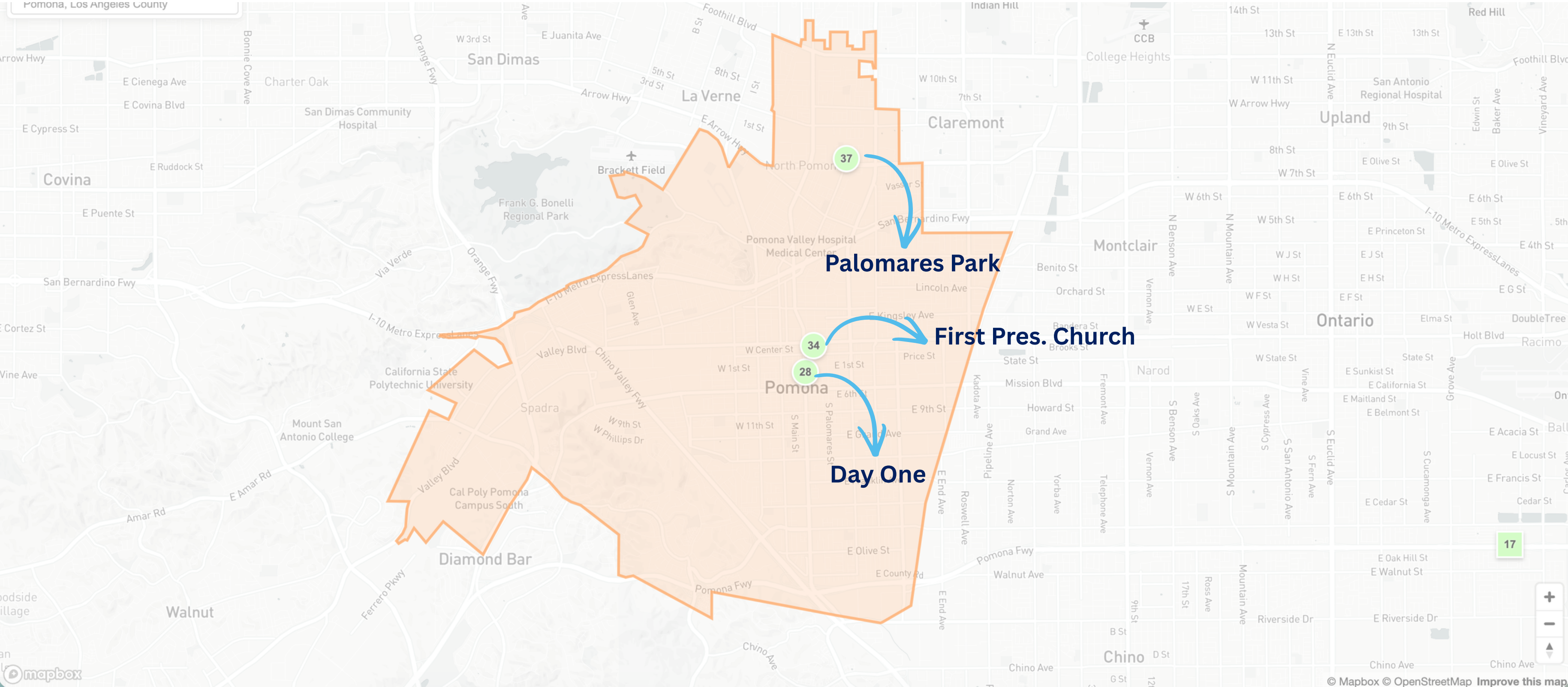
Project Area

Área del Proyecto



Project Area

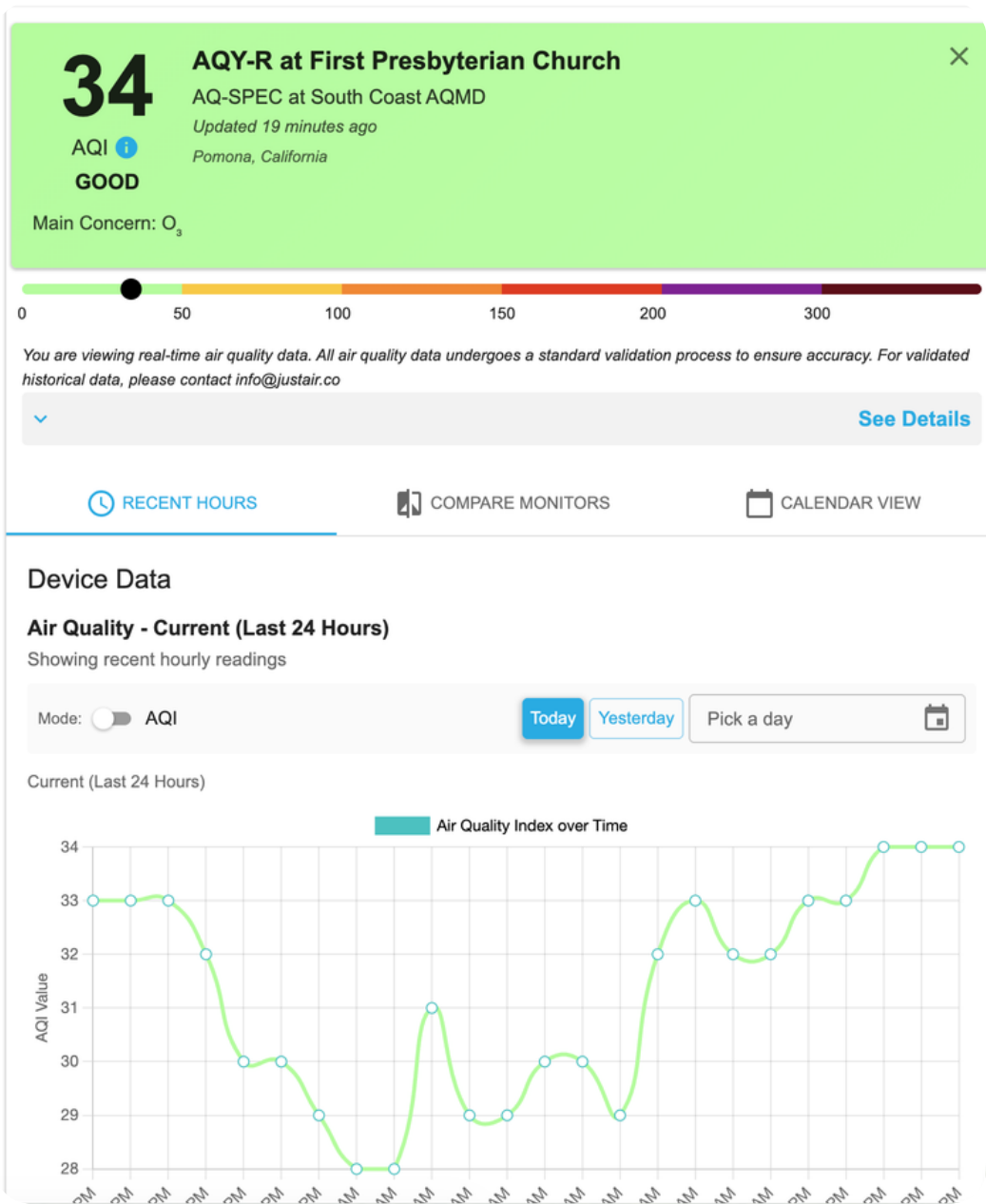
Área del Proyecto



Data (Tuesday, May 5th @ 4:30pm)

Datos (Martes 5 de mayo, 4:30pm)

FIRST PRES. CHURCH



A Brief Lesson on Air Quality

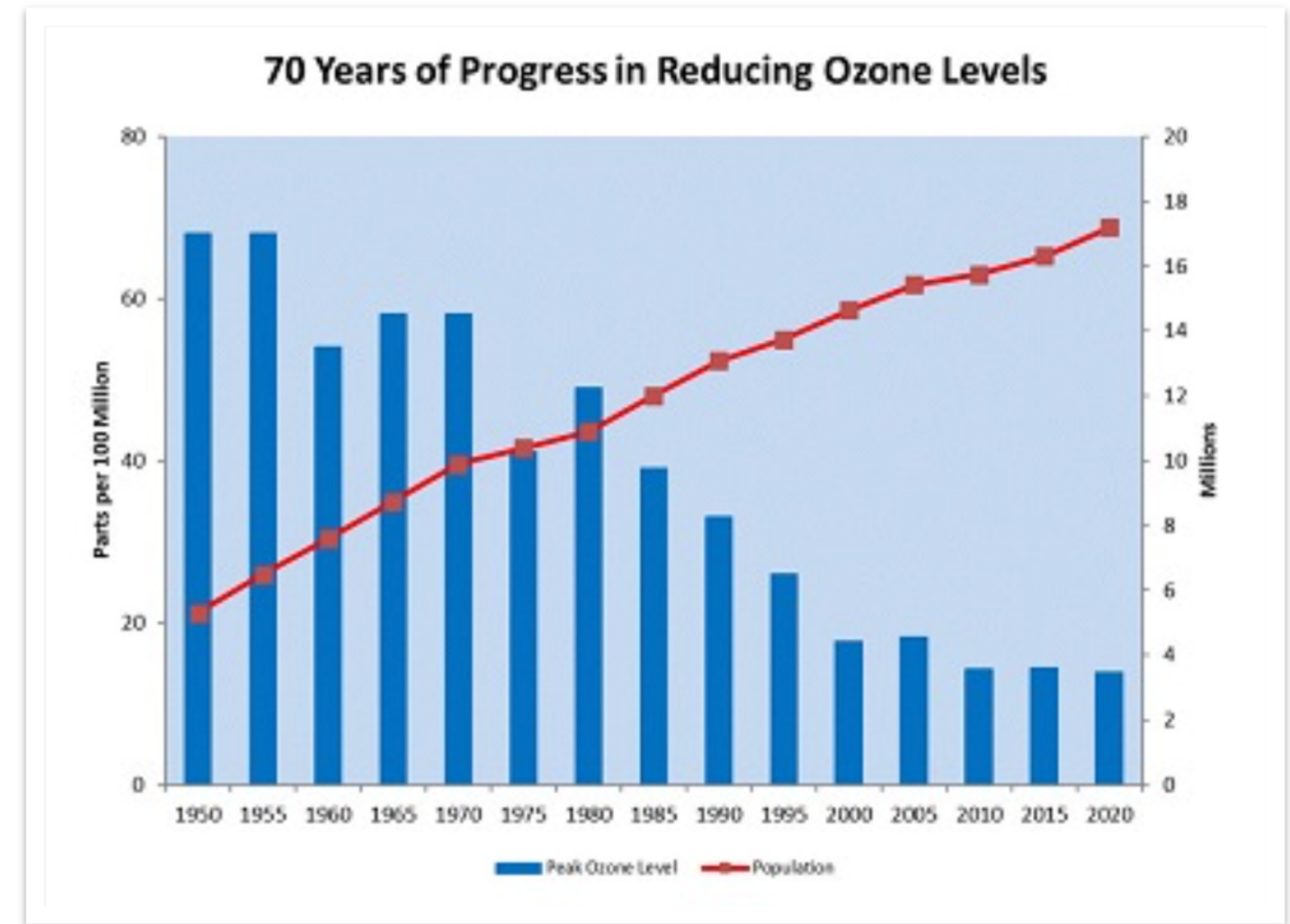
Una breve lección sobre la calidad del aire

South Coast Air Quality Management District

Spanish

South Coast AQMD is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange, Riverside and San Bernardino counties.

El South Coast AQMD es la agencia reguladora responsable de mejorar la calidad del aire en grandes áreas de los condados de Los Ángeles, Orange, Riverside y San Bernardino.



<https://www.aqmd.gov/nav/about>

AIR MONITORING STATIONS

ESTACIONES DE MONITOREO DEL AIRE

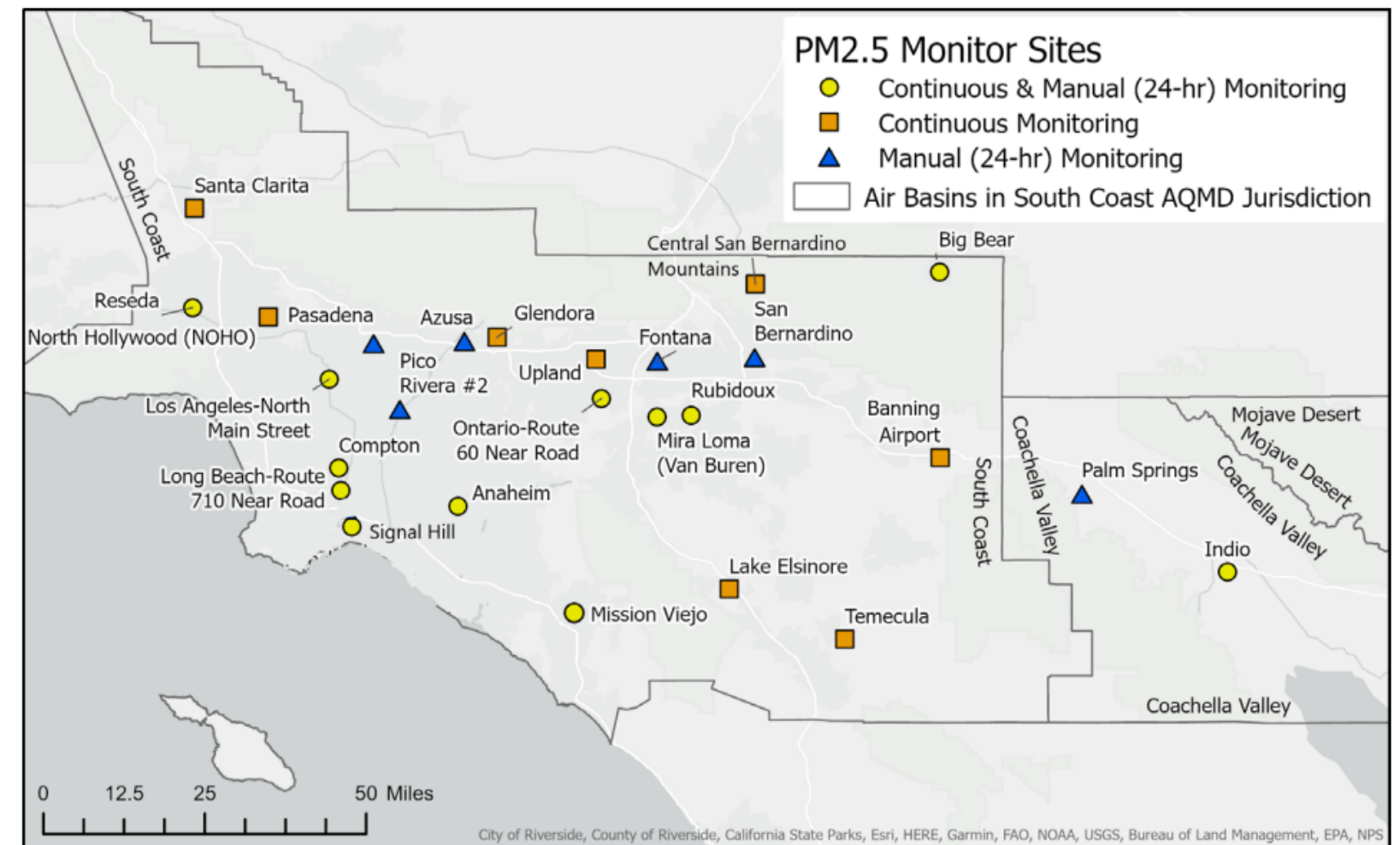
South Coast AQMD operates over 35 permanent air monitoring stations (AMS) across the South Coast Air Basin

El South Coast AQMD opera más de 35 estaciones permanentes de monitoreo del aire en toda la Cuenca Aérea de la Costa Sur.



Part of the AMS in Riverside, CA

Map of Air Monitoring Stations



<https://www.aqmd.gov/home/air-quality/clean-air-plans/monitoring-network-plan>

WHAT ARE AIR SENSORS?

QUÉ SON LOS SENSORES DE AIRE?

- Consumer grade air quality devices started gaining traction in the 2010s
 - Much smaller and lower cost than government reference instruments
 - Easily deployed at people's homes
 - Data quality varies between devices
-
- *Dispositivos de calidad del aire comenzaron a ganar tracción en la década de 2010*
 - *Mucho más pequeño y menor costo que los instrumentos de referencia gubernamentales*
 - *Fácilmente desplegados en los hogares de las personas*
 - *La calidad de los datos varía entre los dispositivos*



Image credits: Polidori A., Papapostolou V., Collier-Oxandale A., Hafner H., and Blakey T. (2021)
Community in Action: A Comprehensive Guidebook on Air Quality Sensors.

SENSORS VS. REGULATORY-GRADE MONITORS

SENSORES VS. MONITORES DE GRADO REGULATORIO

Regulatory-Grade Monitors

- Expensive (\$20,000 – \$40,000)
- Requires supporting equipment and regular checks by a team of experts
- Used for government regulation
- High-quality QA/QC'd data

Monitores de grado regulatorio

- *Costosos (\$20.000 – \$40.000)*
- *Requieren equipos de soporte y verificaciones periódicas por parte de un equipo de expertos*
- *Se utilizan para fines de regulación gubernamental*
- *Datos de alta calidad, sometidos a QA/QC*

Sensors

- Relatively inexpensive (\$100 – \$7000)
- Easier to use out of the box without expertise
- Used for personal and community monitoring
- Data quality not fit for regulatory purposes

Sensores

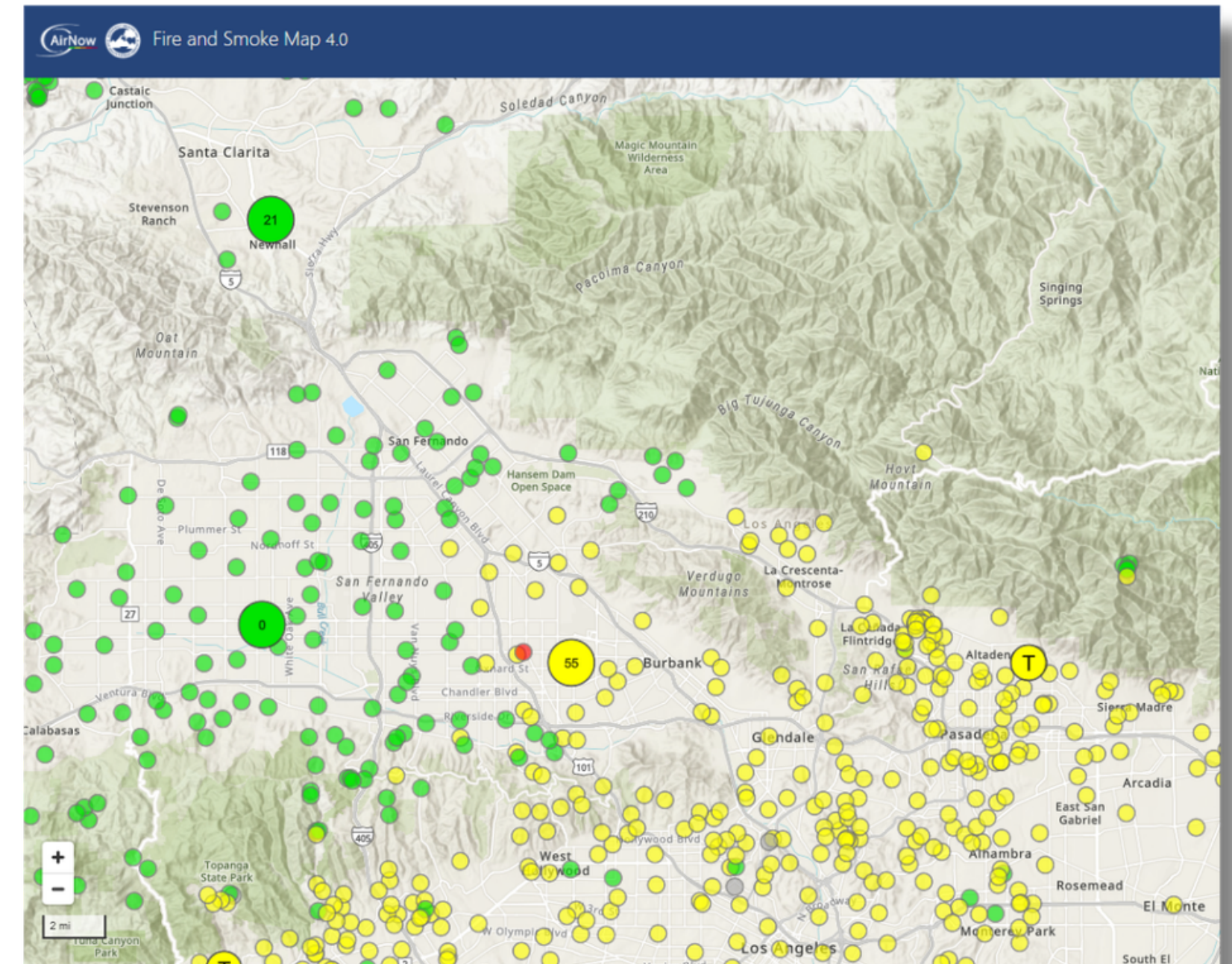
- *Relativamente económicos (\$100 – \$7000)*
- *Más fáciles de utilizar de inmediato, sin necesidad de conocimientos especializados*
- *Se utilizan para el monitoreo personal y comunitario*
- *La calidad de los datos no es adecuada para fines regulatorios*

WHY USE SENSORS?

POR QUÉ UTILIZAR SENSORES?

- Data from air sensors are not as accurate as data from reference monitors
- Air sensors are a good tool for community engagement and raising awareness
- Can help fill in the gaps between air monitoring stations
- *Los datos de los sensores de aire no son tan precisos como los datos de los monitores de referencia.*
- *Los sensores de aire son una buena herramienta para la participación comunitaria y la concienciación.*
- *Pueden ayudar a cubrir los vacíos entre las estaciones de monitoreo del aire.*

Map from EPA Fire and Smoke Map
Mapa del Mapa de Incendios y Humo de la EPA



Shows Air Sensor data in small circles
Reference Instrument data in large
circles
<https://fire.airnow.gov/>

*Muestra los datos de los sensores de aire en
círculos pequeños
Muestra los datos de los instrumentos de
referencia en círculos grandes
<https://fire.airnow.gov/>*

SENSOR LIBRARY GRANT

SUBVENCIÓN PARA LA BIBLIOTECA DE SENSORES

- South Coast AQMD was awarded an EPA grant to empower community-based air quality monitoring through the Sensor Library Program
- Six Aeroqual AQY-R air sensors purchased for Pomona community with grant funds
- *South Coast AQMD recibió una subvención de la EPA para potenciar el monitoreo comunitario de la calidad del aire a través del Programa de Biblioteca de Sensores*
- *Se adquirieron seis sensores de aire Aeroqual AQY-R para la comunidad de Pomona con fondos de la subvención*



Air sensors undergoing collocation calibration for a community monitoring project
Sensores de calidad del aire sometidos a calibración por colocación conjunta para un proyecto de monitoreo comunitario

AEROQUAL AQY-R

AEROQUAL AQY-R

- Streams data to the cloud when configured to Wi-Fi
- Requires access to outdoor power outlet
- Each device measures:
 - Particulate Matter (PM2.5 + PM10)
 - Ozone
 - NO2
 - Temperature
 - Relative Humidity
- *Transmite datos a la nube cuando está configurado para Wi-Fi.*
- *Requiere acceso a una toma de corriente exterior.*
- *Cada dispositivo mide:*
 - *Material particulado (PM2.5 + PM10)*
 - *Ozono*
 - *NO2*
 - *Temperatura*
 - *Humedad relativa*



ADDITIONAL SENSOR DEPLOYMENTS

DESPLIEGUES ADICIONALES DE SENSORES

- 3 additional Aeroqual AQY-R sensors ready for deployment

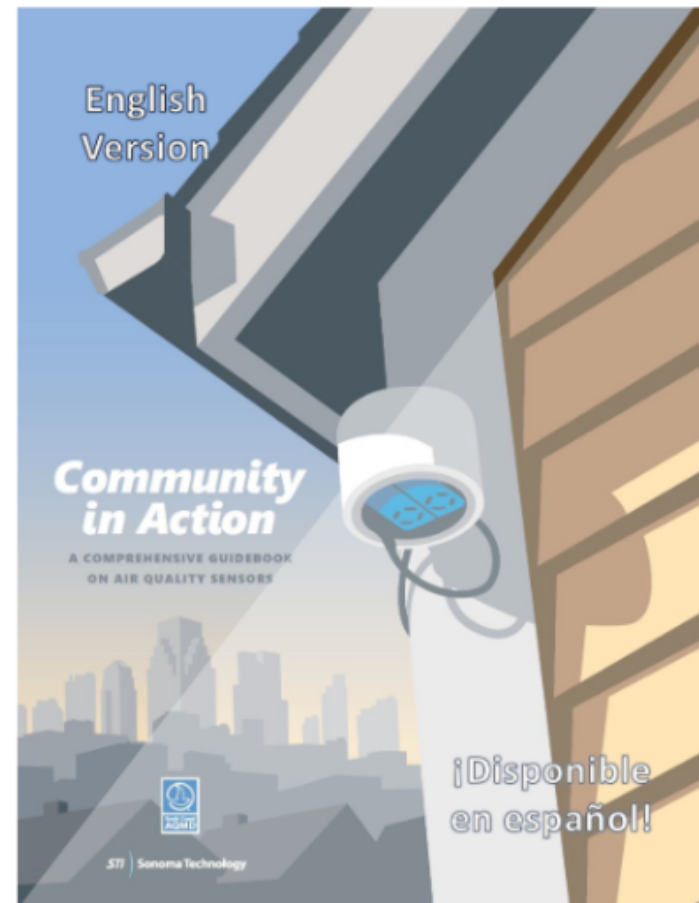
	Aeroqual AQY-R	12	PM _{2.5} , PM ₁₀ , O ₃ , NO ₂	Not portable No battery Measures particles Measures gases Data streams to web dashboard	Sensor must be secured to a pole or wall, plugged into a 110v outlet, and connected to Wi-Fi
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- Additional sensors available:
 - Quant AQ
 - Temtop
 - Davis Airlink
 - Atmotube
- 3 sensores Aeroqual AQY-R adicionales listos para su despliegue.
- Sensores adicionales disponibles:
 - Quant AQ
 - Temtop
 - Davis Airlink
 - Atmotube

	Atmotube Pro	10	PM ₁ , PM _{2.5} , PM ₁₀	Battery Measures particles Data streams to mobile device via Bluetooth	Sensor can be used as a portable handheld device via Bluetooth and data can be exported via the Atmotube app GPS enabled Not waterproof
	A.U.G. Signals AirSENCE	2	PM ₁ , PM _{2.5} , PM ₁₀ , O ₃ , NO ₂ , CO	Not portable No battery Measures particles Measures gases Data streams to web dashboard	Sensor must be secured to a pole or wall, plugged into a 110v outlet, and connected to Wi-Fi
	Davis Airlink	10	PM ₁ , PM _{2.5} , PM ₁₀	Not portable No battery Measures particles Data streams to web dashboard	Sensor must be secured to a pole or wall, plugged into a 110v outlet, and connected to Wi-Fi
	Kunak Air Lite	4	PM ₁ , PM _{2.5} , PM ₁₀ , O ₃ , NO ₂	Not portable Battery Measures particles Measures gases Data streams to web dashboard	Sensor must be secured to a pole or wall, plugged into a 110v outlet
	QuantAQ MODULAIR-PM	5	PM ₁ , PM _{2.5} , PM ₁₀	Not portable No battery Measures particles Data streams to web dashboard	Sensor must be secured to a pole or wall, plugged into a 110v outlet
	Sensit SPOD	3	PM ₁ , PM _{2.5} , PM ₁₀ , tVOC	Not portable Battery Measures particles Measures gases Data streams to web dashboard	Sensor must be secured to a pole or wall, plugged into a 110v outlet (solar powered option available)
	Temtop LKC-1000S+	10	PM _{2.5} , PM ₁₀	Portable Battery Measures particles Data downloadable via USB	Sensor can be used as a portable handheld device Not waterproof

HELPFUL RESOURCES

RECURSOS ÚTILES



Community in Action: A Comprehensive Guidebook on Air Quality Sensors

Check out our air sensor guidebook on air quality project planning, operating air quality sensors, and understanding the data.



Air Sensor Training #2: Understanding Air Quality and Monitoring



SouthCoastAQMD
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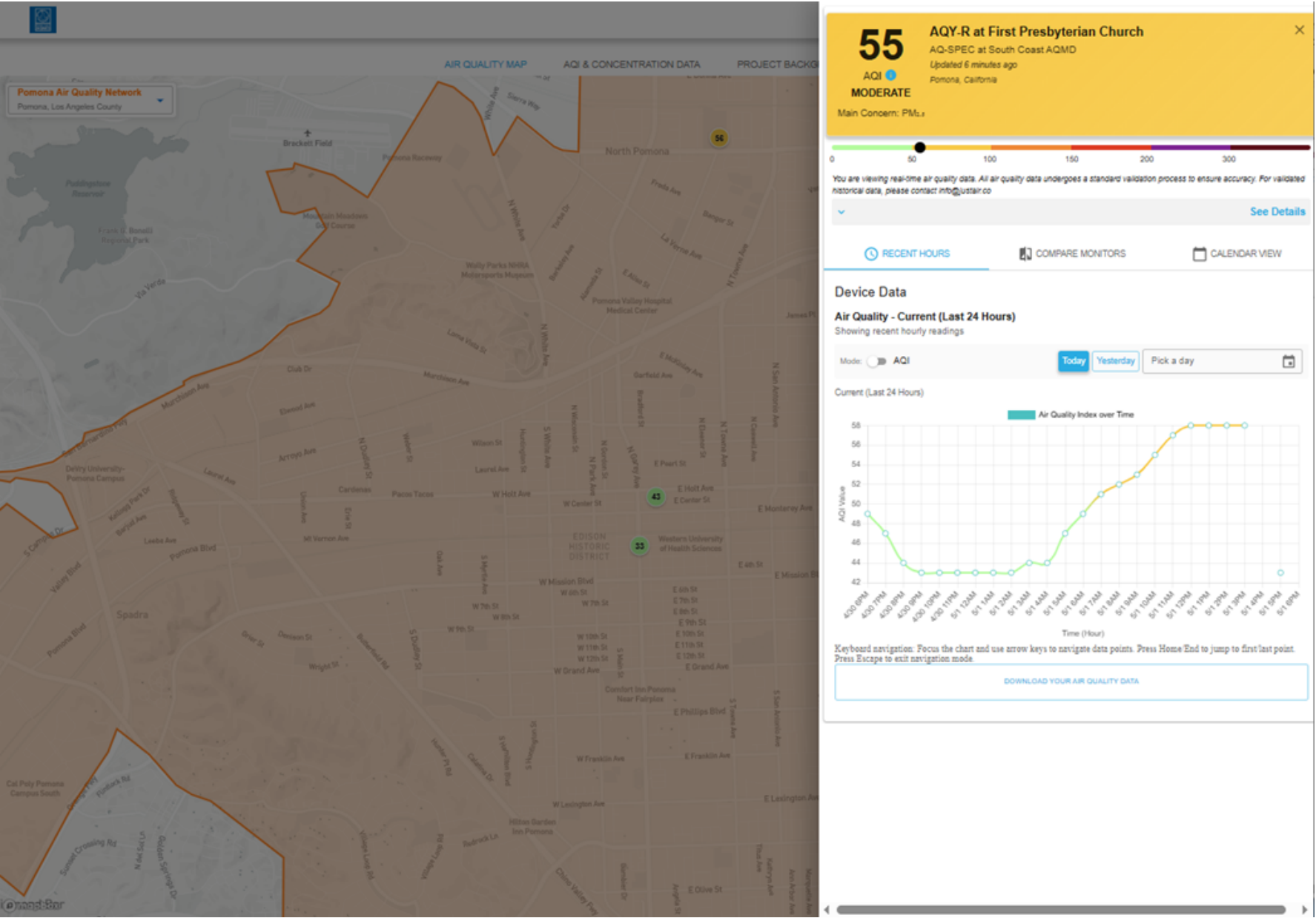
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<https://www.aqmd.gov/aq-spec/special-projects/star-grant>

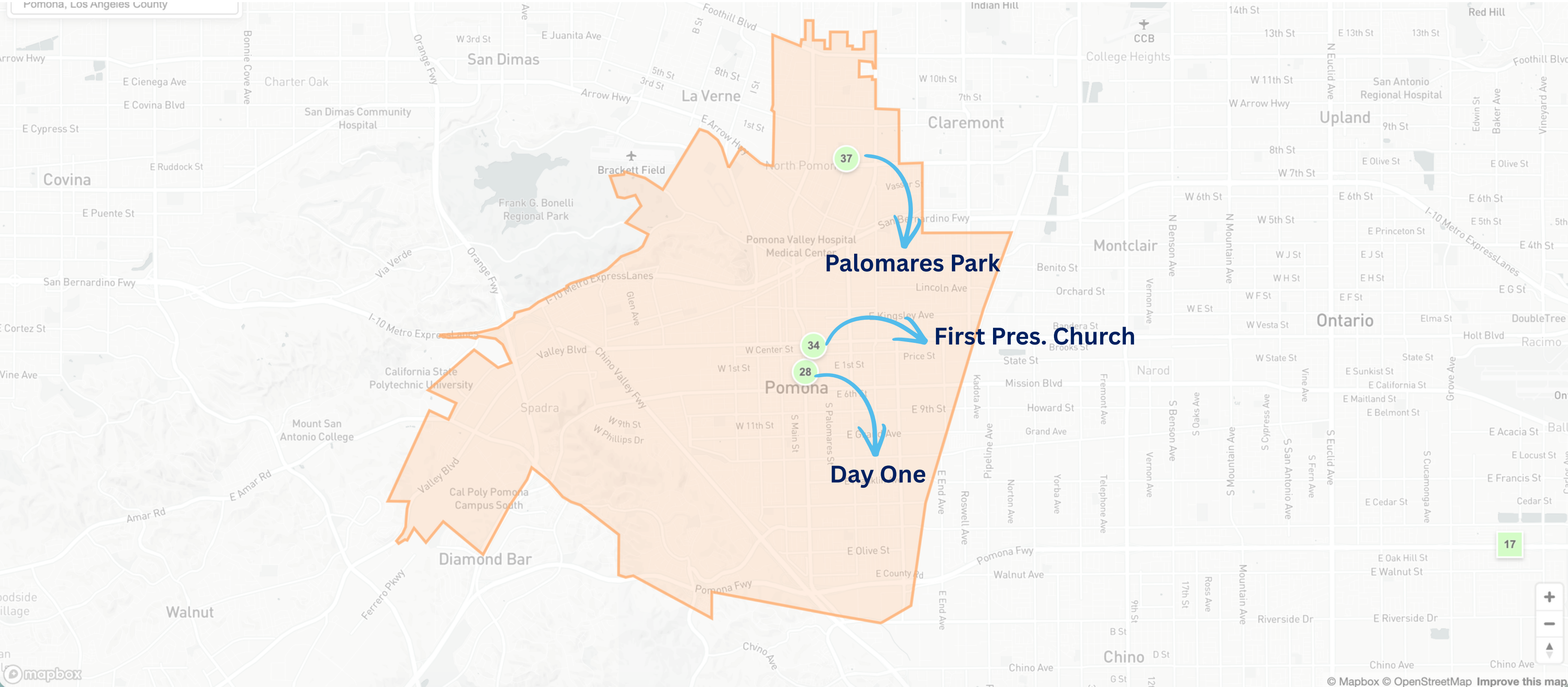
JustAir Dashboard Demo

Demostración del panel de control de JustAir



Project Area

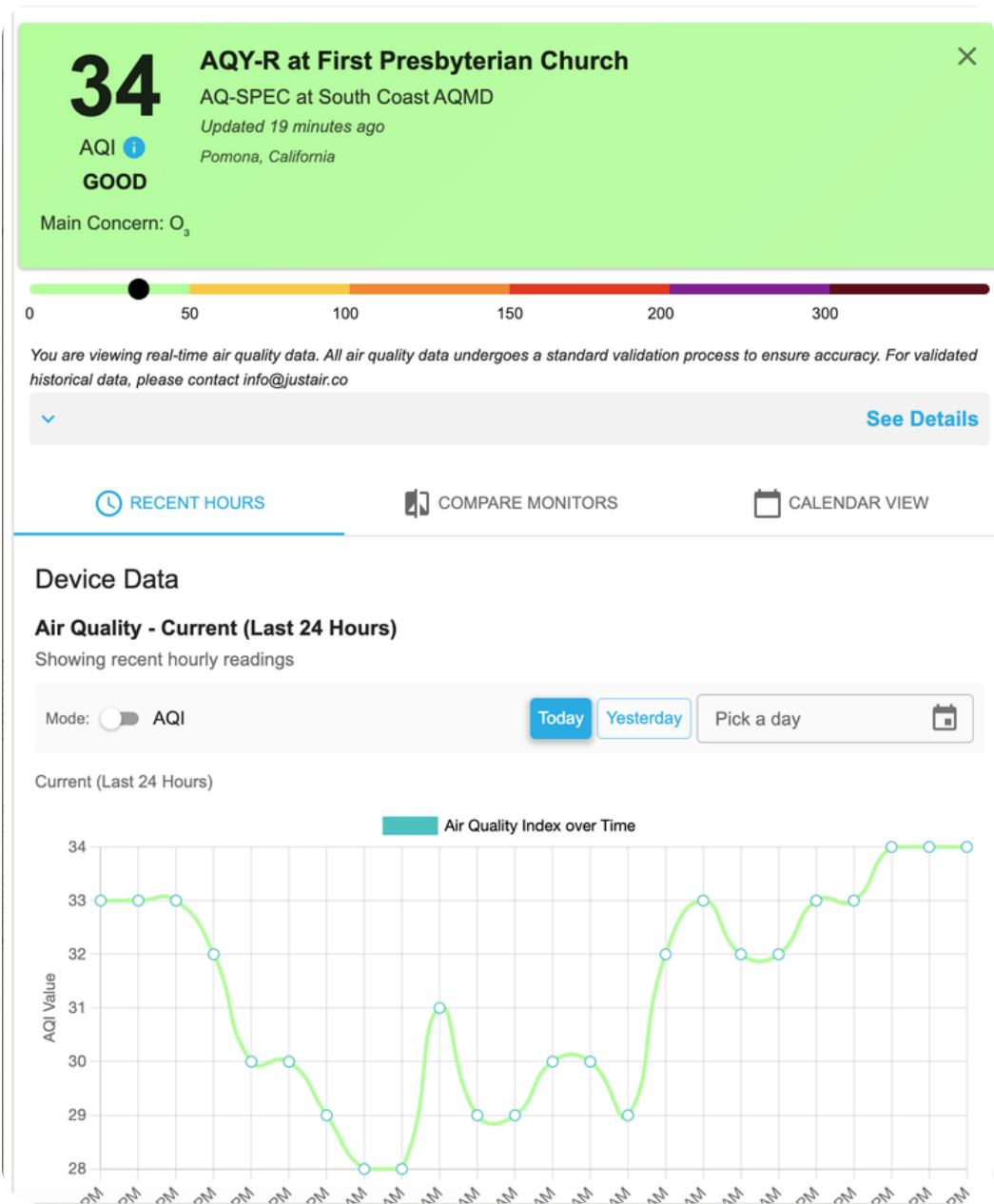
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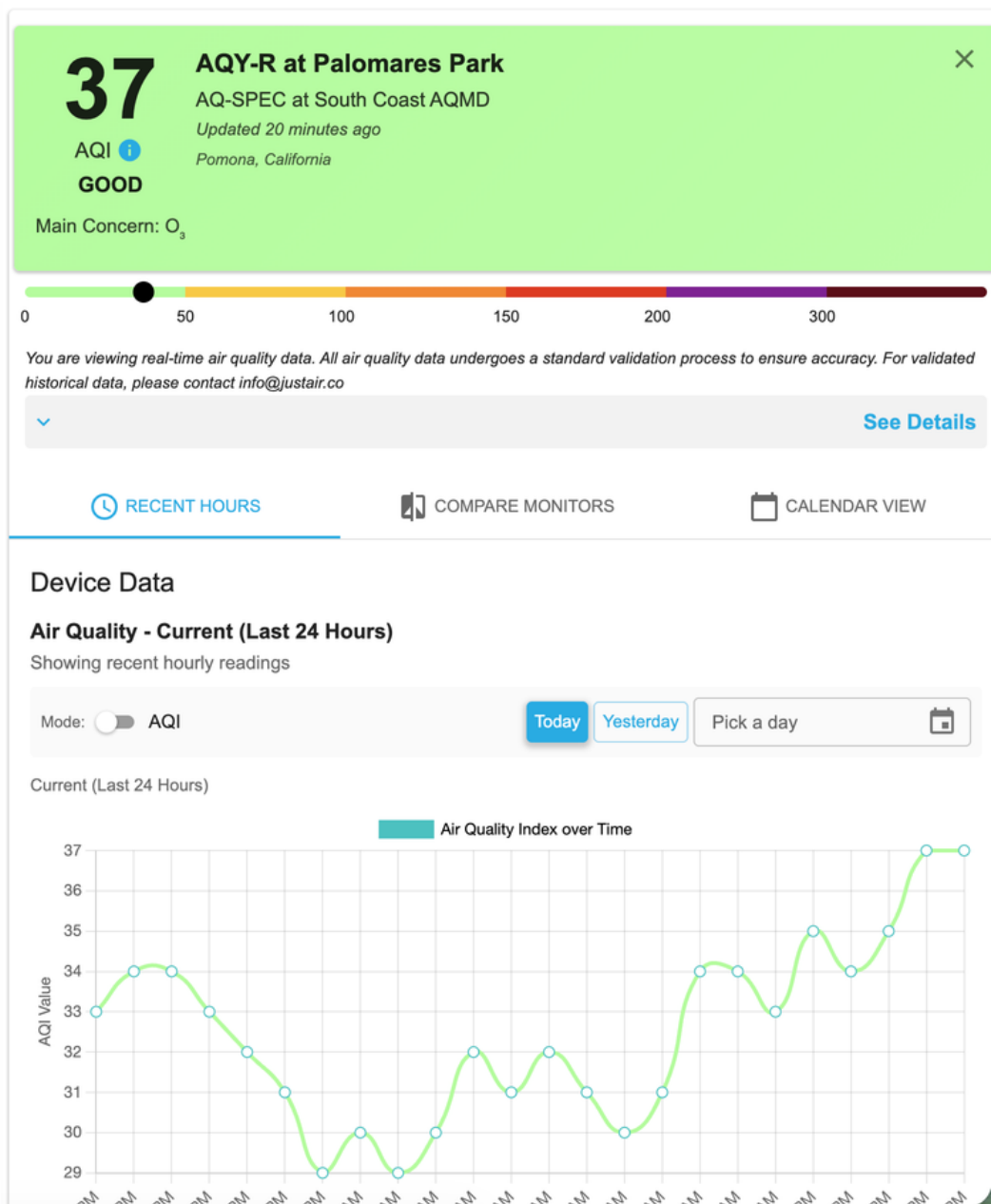
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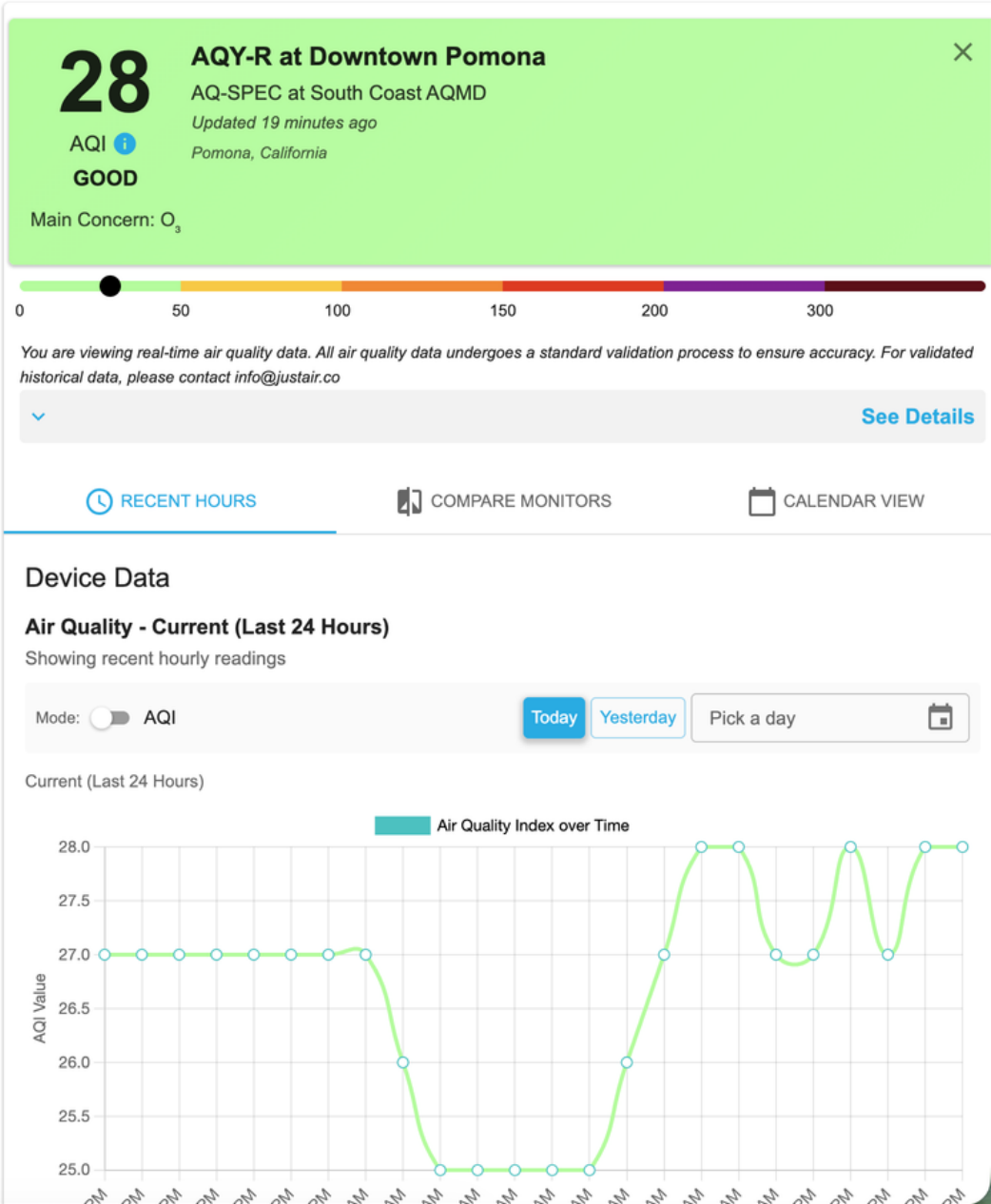
FIRST PRES. CHURCH



PALOMARES PARK

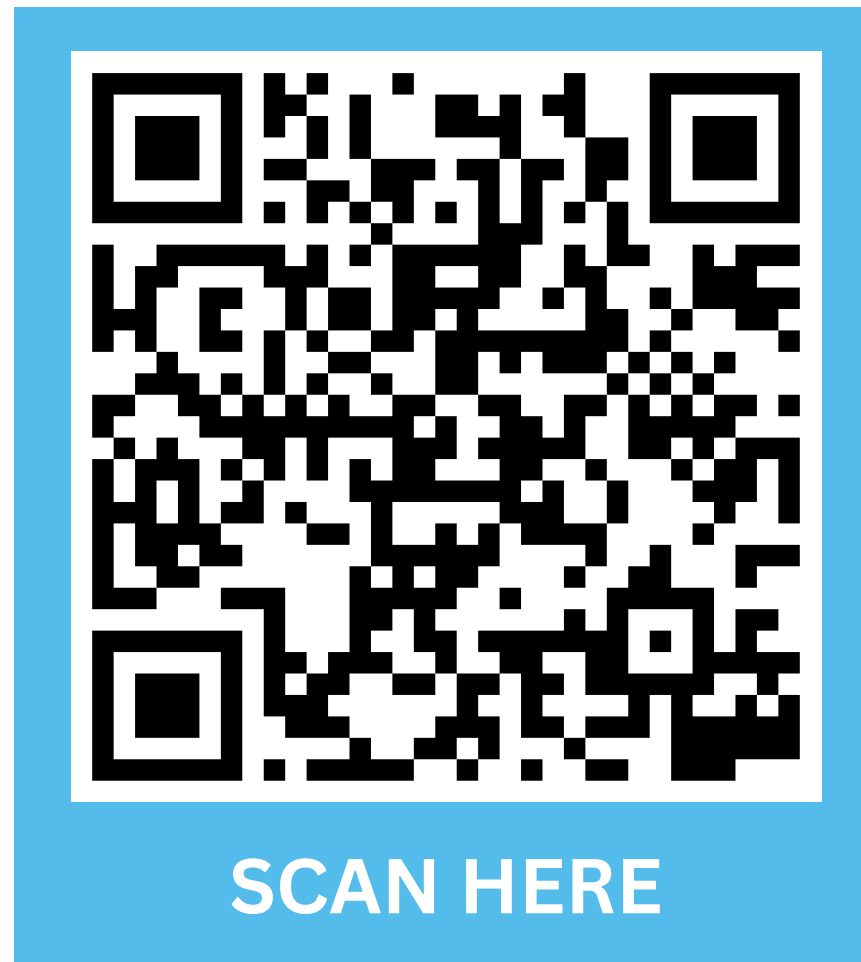


DAY ONE



Just Air Dashboard

Panel de Just Air

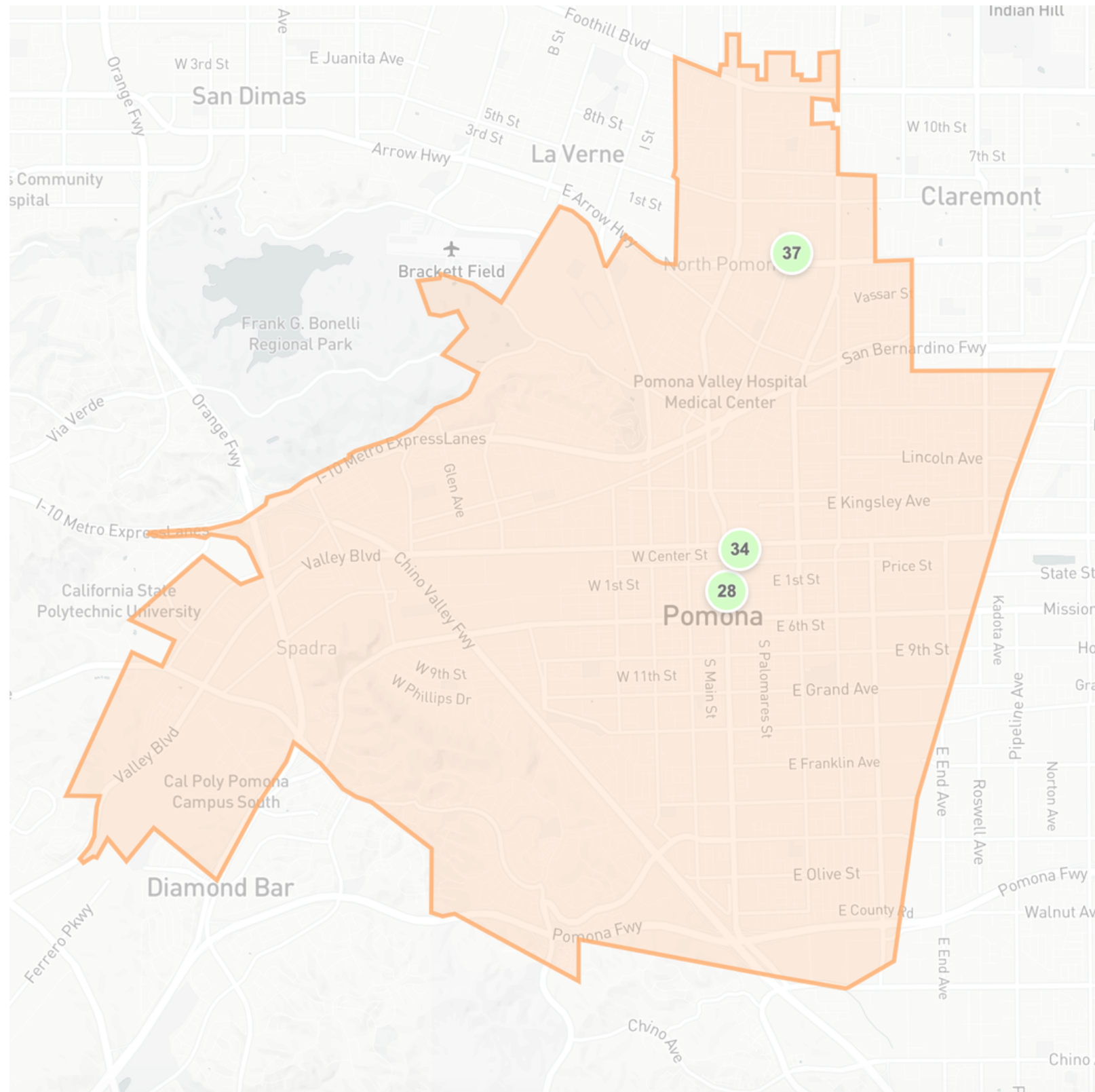


Please scan this QR code or visit:
<https://scaqmd.justair.app/?community=pomona>

Escanea este código QR o visita:
<https://scaqmd.justair.app/?community=pomona>

Mapping Activity

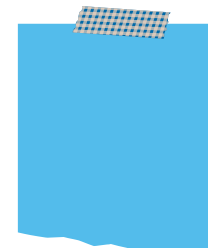
Actividad de mapa



Issue Area
Punto de partida



Places we need a sensor
Lugares en los que necesitamos un sensor



Suggestions or Needs
Sugerencias y necesidades

Discussions

Discusiones

1. What air quality concerns do you experience most often in your neighborhood (for example, traffic pollution, odors, dust, or smoke)?
2. When and where do you notice the worst air quality in the community?
3. What changes or solutions would most improve air quality and help you feel healthier and safer where you live?

1. *¿Qué problemas relacionados con la calidad del aire experimentas con más frecuencia en tu barrio (por ejemplo, contaminación del tráfico, olores, polvo o humo)?*
2. *¿Cuándo y dónde notas que la calidad del aire es peor en la comunidad?*
3. *¿Qué cambios o soluciones mejorarían más la calidad del aire y te ayudarían a sentirte más sano y seguro en el lugar donde vives?*

Questions or Comments

Preguntas y comentarios

Share Outs

Compartir los resultados

Next Steps

Proximos Pasos

Thank you!

¡Muchas Gracias!

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