

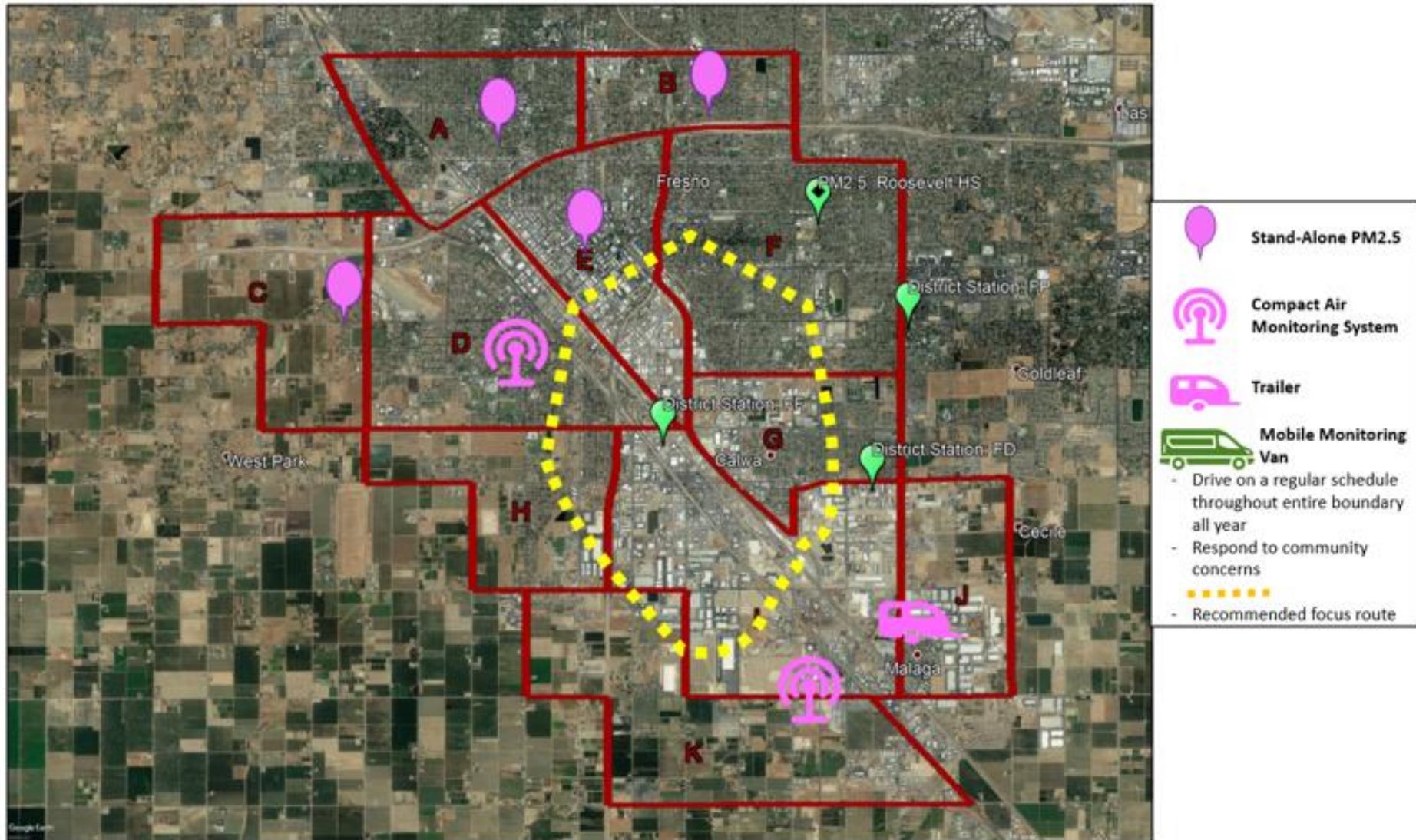
South Central Fresno AB 617 Community Air Monitoring Update

Community Steering Committee Meeting
June 8, 2020

Ongoing Community Air Monitoring

- District continuing to conduct localized air monitoring in South Central Fresno community
- Working to deploy additional air monitoring platforms across the community, according to Community Steering Committee recommended network design
 - Due to challenges in working with school districts, considering alternative locations near schools to place air monitoring equipment
- Air monitoring van actively being used to regularly monitor pollutants in areas of interest of the community and near recommended site locations for network design
- Intensive PM_{2.5} and VOC speciation sampling and laboratory analysis being conducted since late 2019

Community Air Monitoring Network Design



Community Air Monitoring Platforms



Community Air Monitoring Platforms (cont'd)



Community Air Monitoring Platforms (cont'd)



Online Sites in South Central Fresno

Real-Time PM2.5

- Bitwise South Stadium
- Roosevelt High School
- Fresno-Foundry (near-road site)

VOC and PM2.5 Speciation

- Fresno-Foundry
- Measurements to continue here until Malaga Elementary trailer is in place (soon)

Mobile Air Monitoring Van

- Regular measurements in community designated areas of interest and in community selected locations

Pending Sites in South Central Fresno

Real-Time PM2.5

- **Heaton Elementary & Yosemite Middle School:** Waiting on Fresno Unified, working on alternative locations
- **Madison Elementary:** Waiting on Central Unified, working on alternative locations

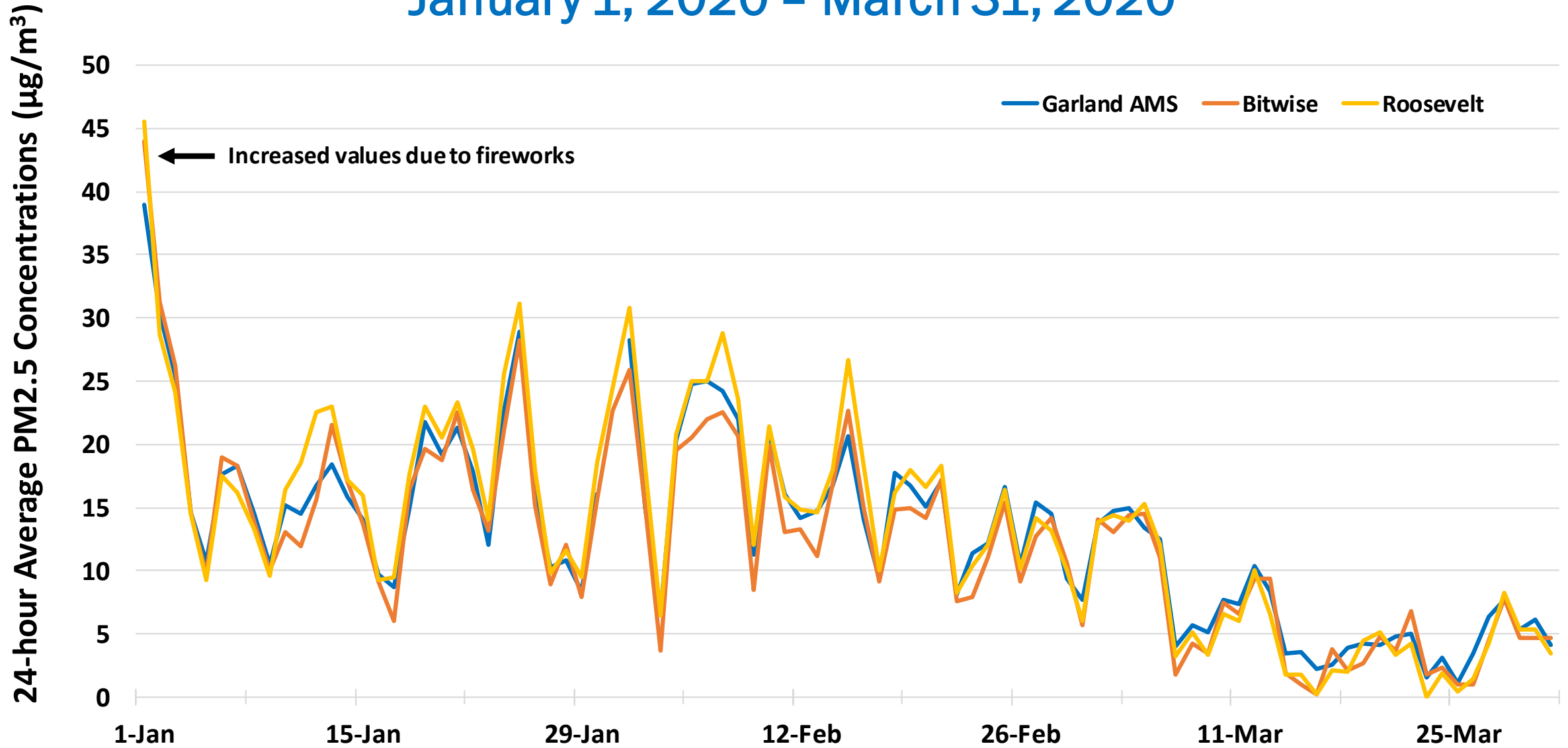
Compact Multi-Pollutant Air Monitoring System

- **Orange Center School:** School Board voted against placing equipment at this site, working on alternative locations
- **Edison High School:** Waiting on Fresno Unified, working on alternative locations
- Compact system being operated at Fresno-Foundry in the interim

Air Monitoring Trailer

- **Malaga Elementary:** Approved by Fowler Unified in February 2020, completing electrical work, then trailer will be installed

Daily Average PM2.5 Data Comparison January 1, 2020 – March 31, 2020



Comparison of Average PM2.5

January 1 – March 31, 2020

Site	Average PM2.5 Concentration ($\mu\text{g}/\text{m}^3$)
Fresno-Garland	13.1
Fresno-Roosevelt	13.7
Fresno-Bitwise	12.5
Fresno-Foundry*	14.7

*Microscale site located adjacent to Highway 99

Mobile Air Monitoring Van Activities

Site A: Parking lot on east corner of Tulare and 'R' Street

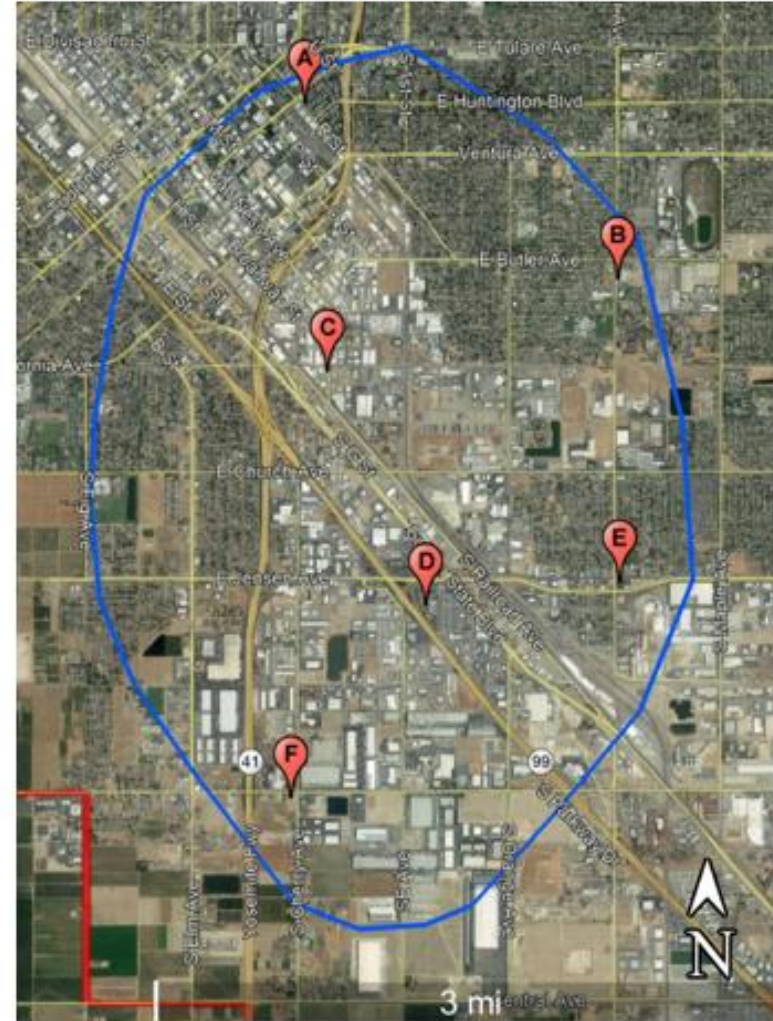
Site B: Parking lot on south east corner of East Butler Ave and South Cedar Ave

Site C: Parking lot on southwest corner of East California Ave and South Van Ness Ave

Site D: On 2nd Street south of intersection with Jensen Ave

Site E: Parking lot on southeast corner of E Jensen Ave and S Cedar Ave

Site F: Unpaved lot on southwest corner of E North Ave and S Cherry Ave

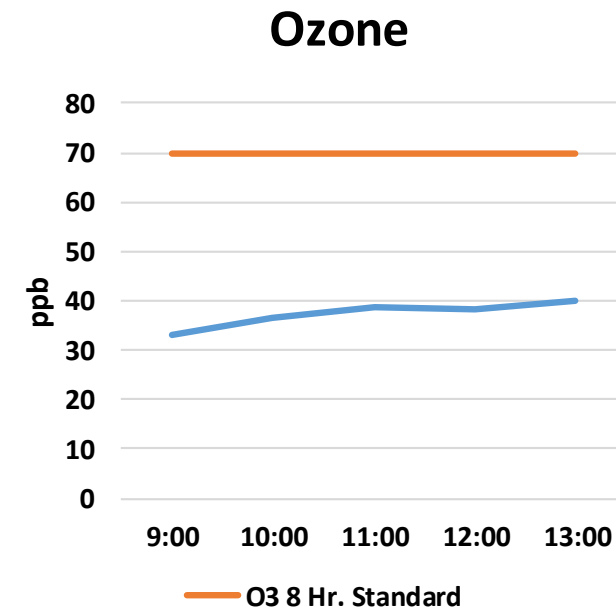
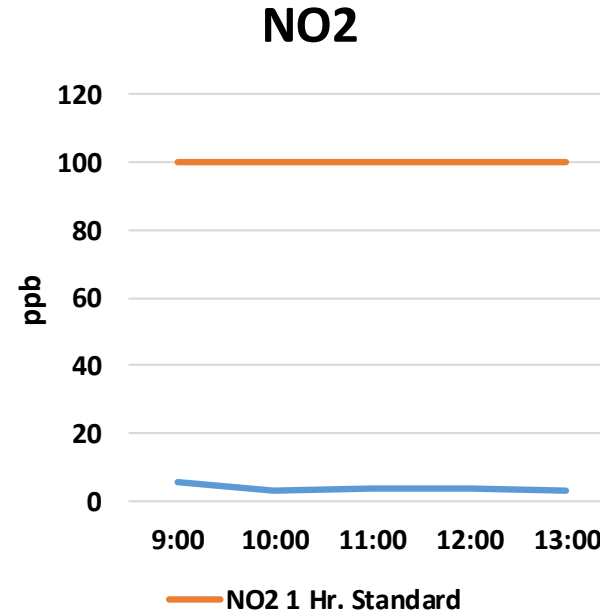
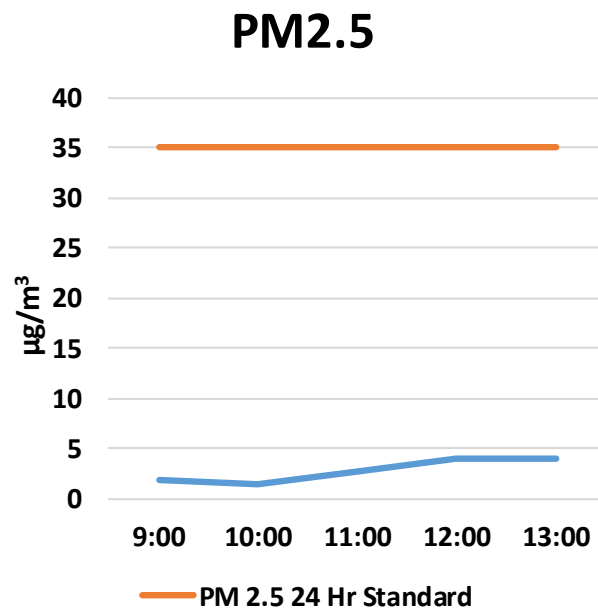


Mobile Air Monitoring Van Activities (cont'd)

- Short-term measurements taken in multiple locations on various days in January 2020
- The concentrations of pollutants measured for all locations were minimal during this period:
 - PM_{2.5} did not exceed 16.6 $\mu\text{g}/\text{m}^3$, below the federal 24-hr PM_{2.5} standard of 35 $\mu\text{g}/\text{m}^3$
 - Ozone did not exceed 53 ppb, below the federal 8-hr ozone standard of 70 ppb
 - CO did not exceed 0.59 ppm, below the federal 1-hr CO standard of 35 ppmv
 - NO₂ did not exceed 52 ppb, below the federal 1-hr NO₂ standard of 100 ppb
 - SO₂ did not exceed 0.9 ppb, below the federal 1-hr SO₂ standard of 75 ppb
 - VOC analyzers did not detect any measurable benzene, toluene, ethylbenzene, or xylene (BTEX) emissions at selected locations during this monitoring period
 - BTEX is a good indicator of VOC concentrations as a whole

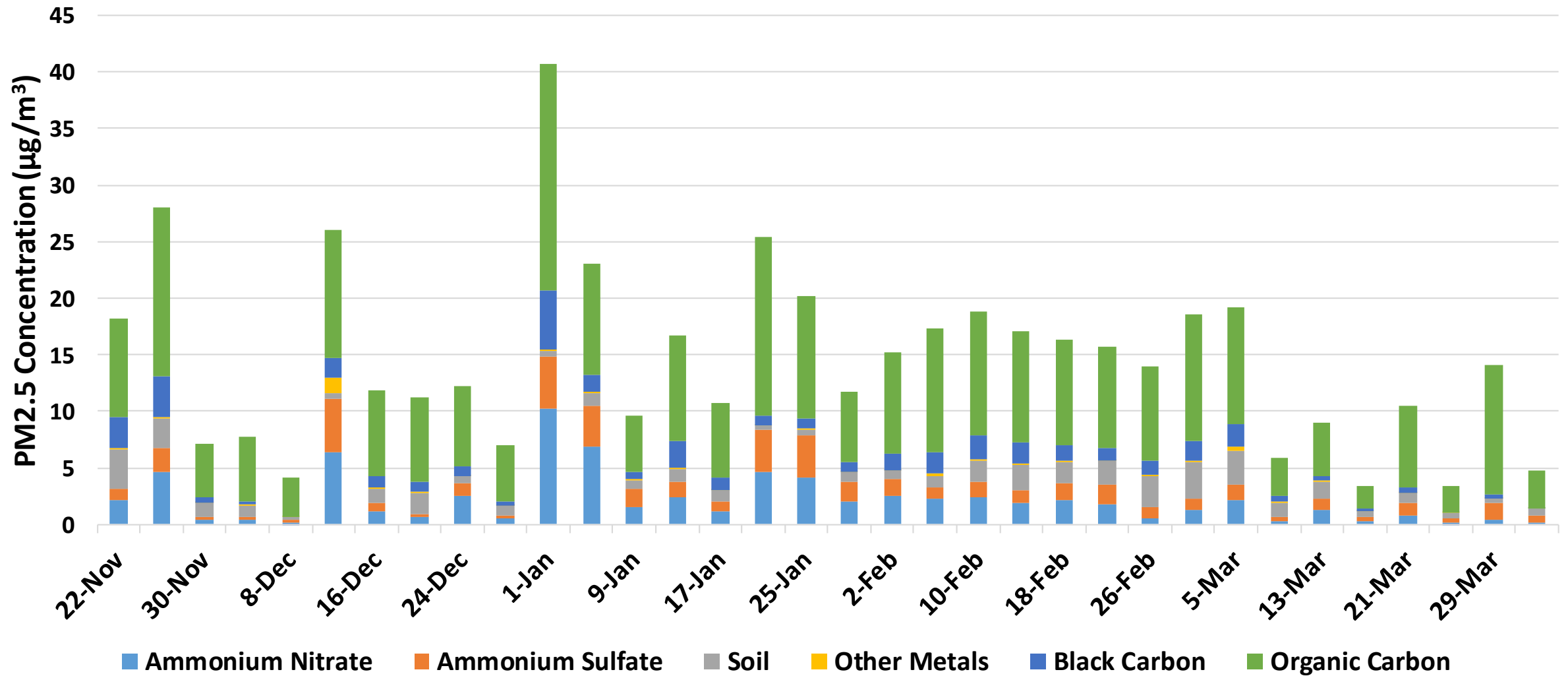
Mobile Air Monitoring Van Activities (cont'd)

- Multiple hour measurements taken at single locations in March 2020
 - Collected data allowed for better comparison with federal air quality standards
 - District focusing these efforts in areas identified in the Community Air Monitoring Plan
- Example: March 19 measurements near Edison High School



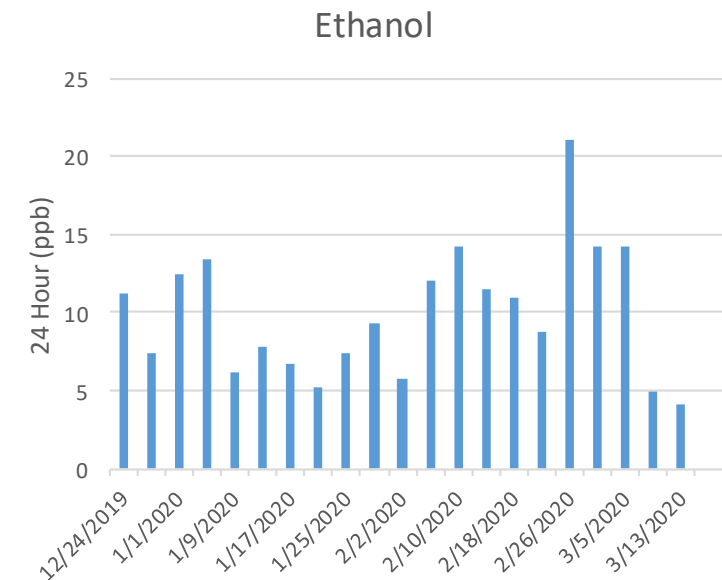
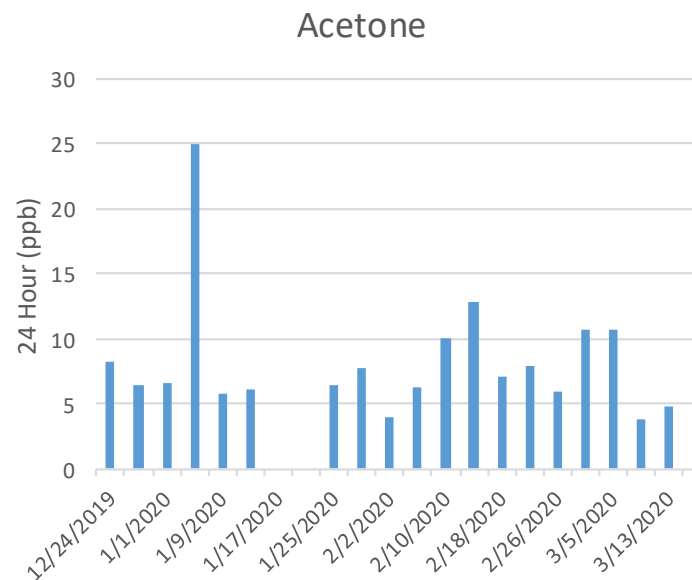
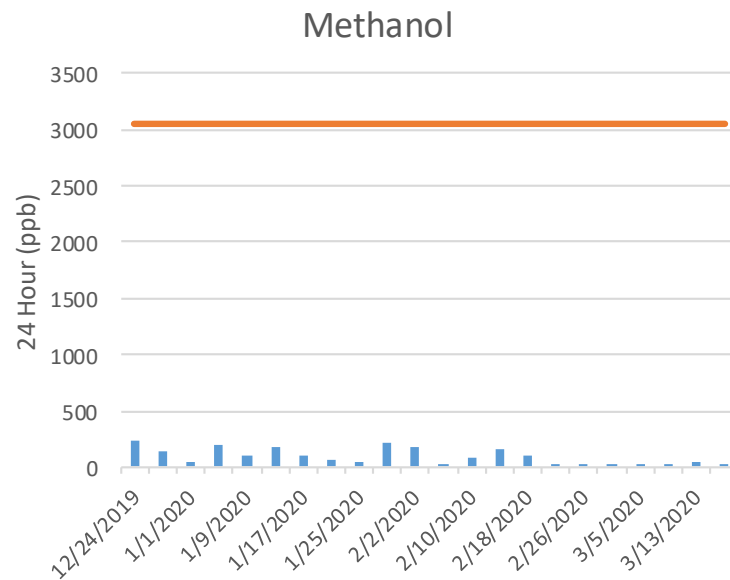
PM2.5 Speciation Analysis

Fresno-Foundry Site (November 2019 – March 2020)

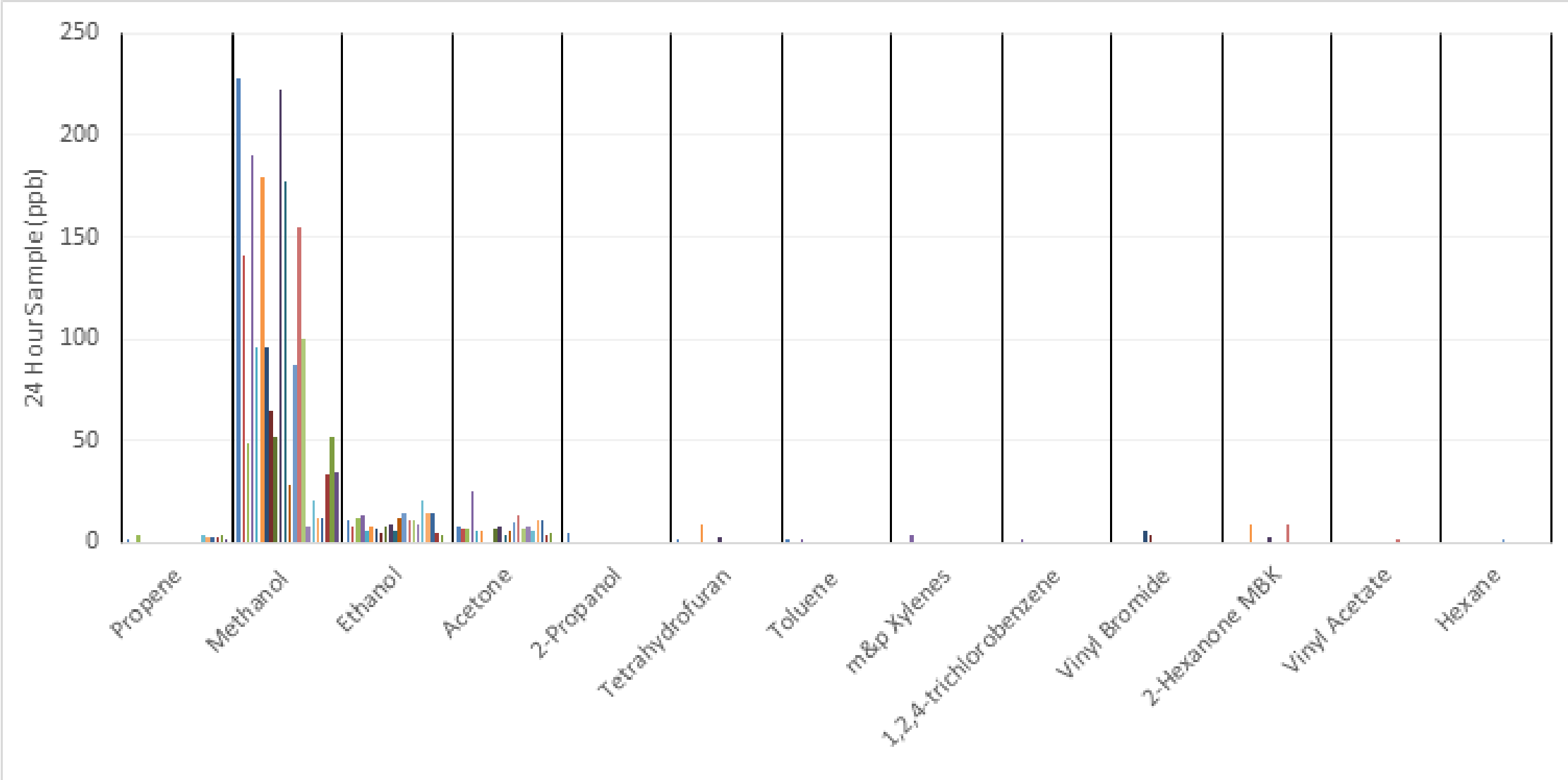


VOC Speciation Analysis

- VOC measurements and speciation laboratory analysis being conducted at Fresno-Foundry site since December 2019
- Laboratory analysis isolates concentrations of 68 VOC species
 - Results show trace or no detections of most VOC species
 - Focusing results on which species were detected in laboratory analysis



Detected VOC Species



Availability of Collected Community Air Quality Data

- CARB continuing to develop statewide air quality data portal (AQview) to display and provide community air monitoring data from selected AB 617 communities
 - AQview website located at: <https://ww2.arb.ca.gov/es/community-air-quality-portal>
 - Air quality data from Valley AB 617 communities now available at this website
 - Monthly data will continue to be made available as air monitoring campaign continues
- Real-time community air monitoring data available on District AB 617 webpage at: <http://community.valleyair.org/community-air-monitoring>

Development and Availability of Ongoing Reports

- District will be developing comprehensive quarterly reports summarizing air monitoring data collected
 - Quarterly reports will be posted to District AB 617 webpage
- Detailed reports of laboratory PM_{2.5} and VOC speciation analysis also to be posted on District AB 617 webpage
- Report summarizing collected air monitoring data from February 2019 through March 2020 is available at:
<http://community.valleyair.org/selected-communities/south-central-fresno/air-monitoring/>

Comments/Questions?