Spare the Air Youth
TECHNICAL ADVISORY MEETING
June 16, 2020
AGENDA

1. Welcome and Updates (10 minutes)
2. Air Quality Monitoring during SIP (15 minutes)
3. Safe Routes to School in the next School Year (30 minutes)
4. Stretch Break (15 minutes)
5. SRTS Resources and Organizational Support during COVID-19 (45 minutes)
6. Announcements (5 minutes)

*High School Working Group Meeting moved to June 24*
STAY UPDATES

• STAY HS Working Group Meeting – June 24
• STAY HS Grant Program update
AIR QUALITY DURING SIP
MICHAEL FLAGG, AIR DISTRICT
Shelter-in-Place & Changes in Air Quality

Spare the Air Youth Technical Advisory Committee
June 16, 2020

Michael Flagg
Meteorology and Measurement Division
Ambient Air Quality Analysis Section
Overview

• Overview of Air District
• Reduction in Emissions & Factors Affecting Air Quality
• Regional Snapshot of Changes in PM$_{2.5}$
• Monitoring Site Specific Changes
• Questions
The Air District

• Established in 1955
• 9-county jurisdiction; 5,340 square miles; 7 million residents
• Governing board of 24 elected officials
• Mission: To create a healthy breathing environment for every Bay Area resident while protecting and improving public health, air quality, and the global climate
Factors Affecting Air Quality

- Air pollution concentrations vary in time and space due to:
  - Natural background sources
  - Nearby emissions
  - Transport from other areas
  - Meteorology
  - Chemical reactions
  - Topography

Source: EEA, 2015, Air Quality in Europe, 2015 Report
Estimates of Emission Reductions

Traffic (VMT)

50 to 85%  
(per traffic counts and cell phone tracking data)

Total Emissions

CO\textsubscript{2}: 20 to 30%

PM\textsubscript{2.5}: 15 to 25%

NO\textsubscript{X}: 30 to 45%
Regional PM$_{2.5}$ Network

- Regional Network is designed to meet EPA federal monitoring requirements and other local objectives
- Currently, the Air District operates 17 PM$_{2.5}$ monitoring sites throughout the region
- This includes 4 near-road monitoring sites
  - Berkeley Aquatic Park
  - Laney College
  - Pleasanton
  - San Jose – Knox
Historical Comparison to Previous Spring Months (2015-2019)

Bay Area PM$_{2.5}$ (March – May) 2015 – 2019

Sites with Decreases in Average Concentrations

Historical:

Shelter-in-Place:
(Mar 16 – May 26, 2020)

Average
Concentration
Near-Road Site
Historical Comparison to Previous Spring Months (2015-2019)

Bay Area PM$_{2.5}$ (March – May) 2015 – 2019

Sites with Similar Average Concentrations

- **Shelter-in-Place**: (Mar 16 – May 26, 2020)
- **Average Concentration**
- **Near-Road Site**
Historical Comparison to Previous Spring Months (2015-2019)


Shelter-in-Place: (Mar 16 – May 26, 2020)

All Sites Measuring Fewer “High” Concentrations
West Oakland Concentrations Lower Than Previous Spring Months


Shelter-in-Place: (Mar 16 – May 26, 2020)

Average Concentration

West Oakland PM$_{2.5}$ (March – May) 2015 – 2019
San Pablo Concentrations Similar to Previous Spring Months

San Pablo PM$_{2.5}$ (March – May) 2015 – 2019

Historical:

Shelter-in-Place:
(Mar 16 – May 26, 2020)

Average Concentration
Questions?

Bay Bridge
April 23, 2020

Photo: Liz Hafalia, The Chronicle
SAFE ROUTES TO SCHOOL IN THE NEXT SCHOOL YEAR

TAC DISCUSSION
SRTS IN THE NEXT SCHOOL YEAR

• How are the schools that you work with talking about opening up next Fall?
• How is your group or other providers delivering encouragement and education programming next year?
• How can SR2S help students with social distancing upon arrival when walking/biking to school?
• How will we keep volunteers (parents, teachers, students) engaged?
15 MIN STRETCH BREAK!

WE’LL RESUME AT XX:XX AM
ENVISIONING WITH PLACE IT!

JAMES ROJAS AND JOHN KAMP
ANNOUNCEMENTS

TAC-WIDE