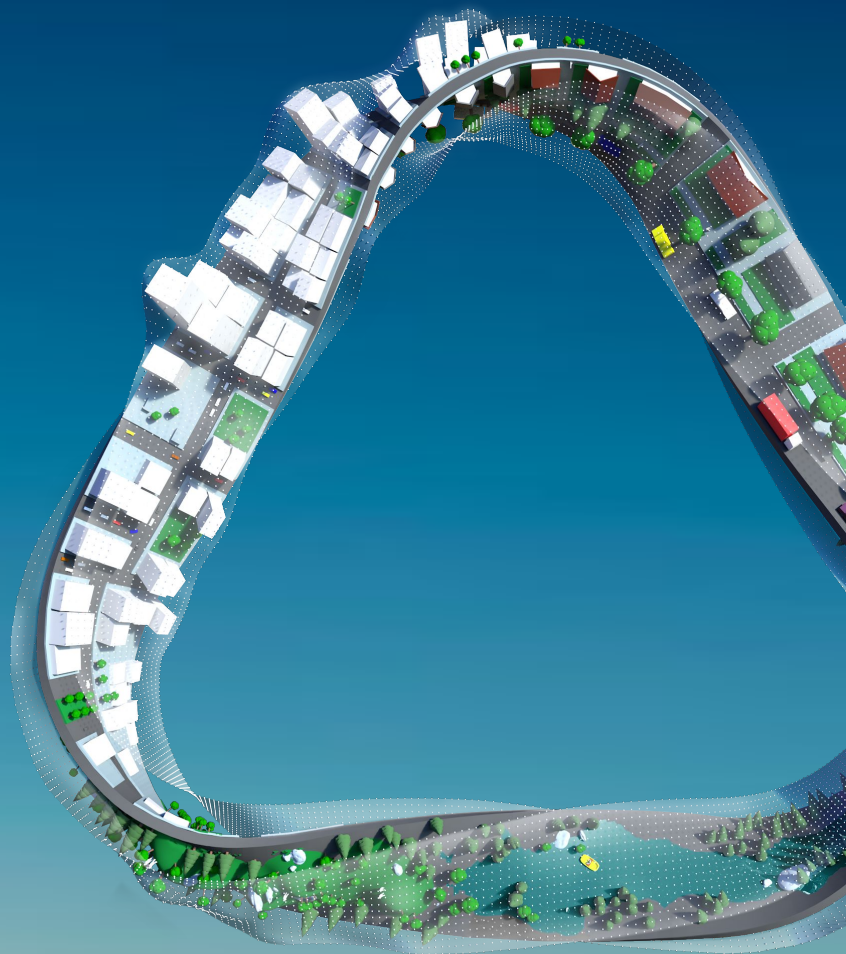




Environmental intelligence for people and the planet

April 2019

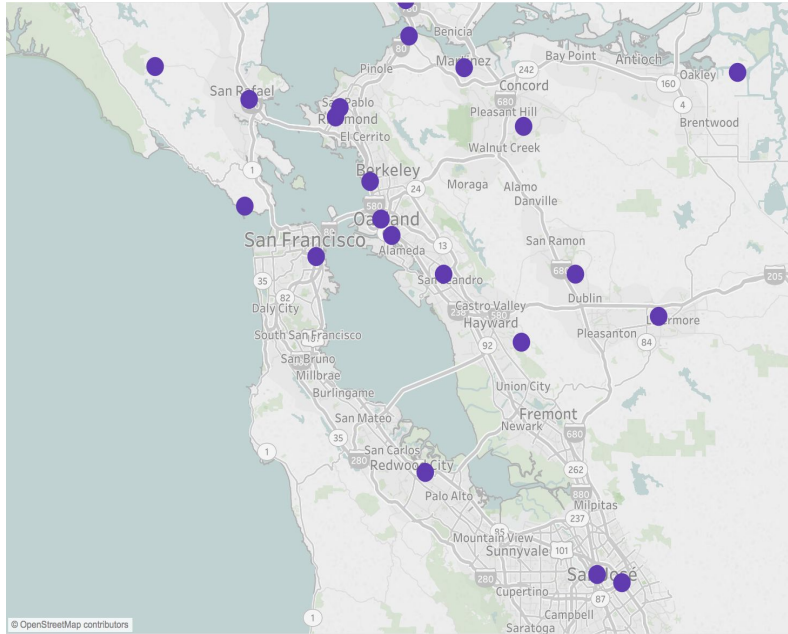


Agenda

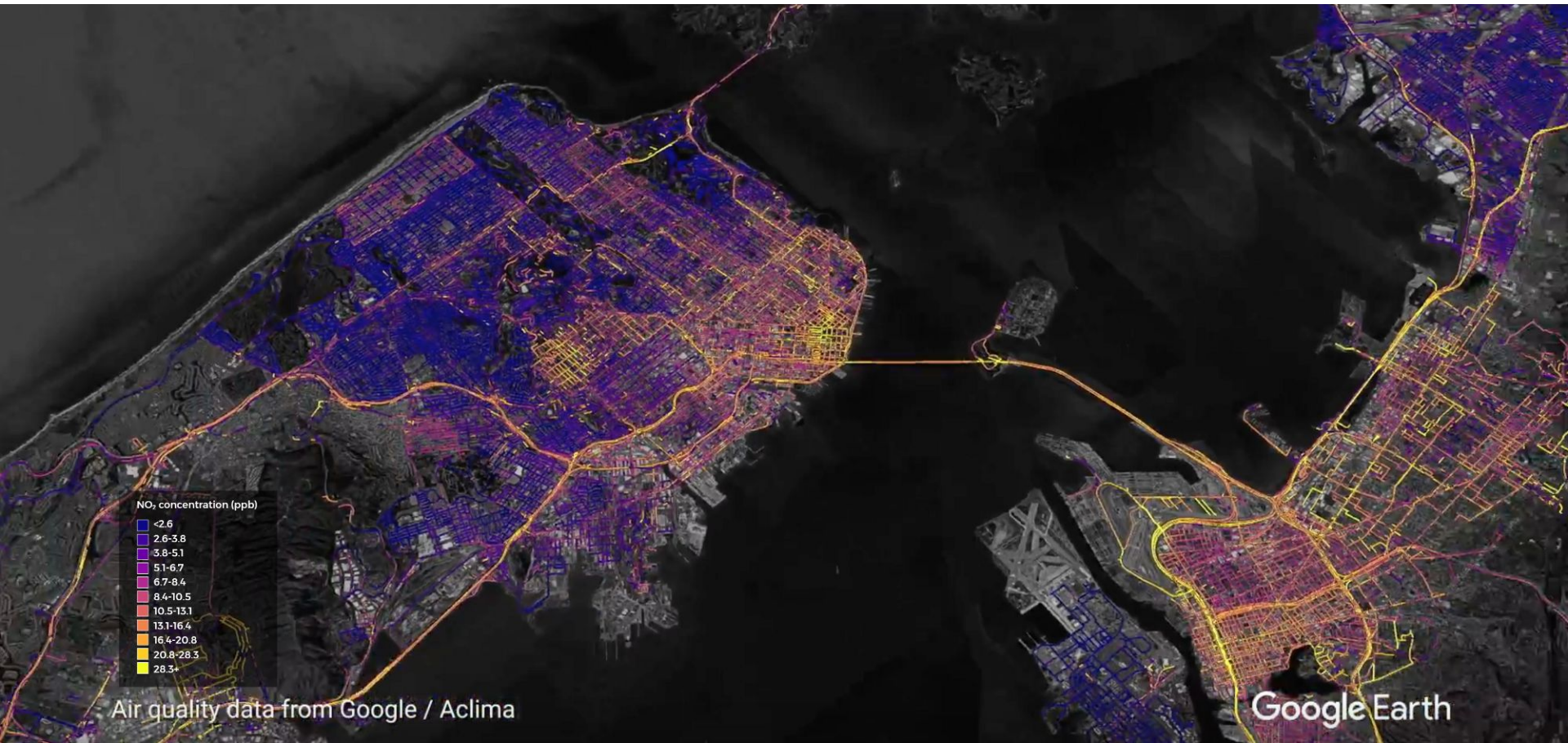
- Hyper-local Mapping Review & County Contract 559672
- Progress
- Initial Findings

Hyper Local Mapping

Today: Sparse Coverage, Low Resolution



Aclima Future: Hyper-local, high resolution



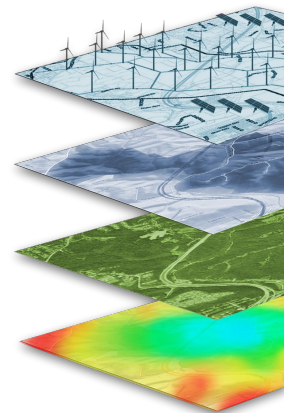
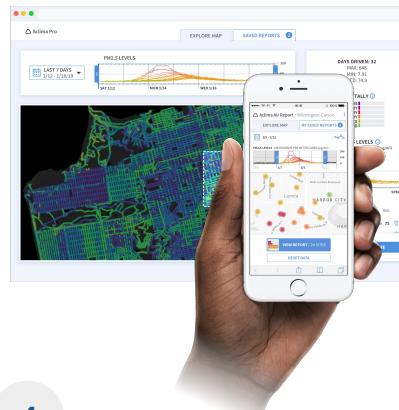
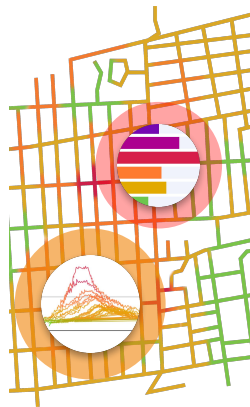


Measuring what matters

For a multi-pollutant view, we measure critical air pollutants, greenhouse gases, and more:

- Black Carbon
- Carbon Dioxide (CO₂)
- Carbon Monoxide (CO)
- Methane (CH₄)*
- Nitric Oxide (NO)
- Nitric Dioxide (NO₂)
- Ozone (O₃)
- Particulate Matter (PM_{2.5})
- Total Volatile Organic Compounds (TVOC)*
- Meteorology
- +More

A Unified Platform



1

2

3

4

5

Stationary & Mobile Sensors

Best-in-class data quality

End-to-end network management

Enabling unprecedented scale and block-by-block resolution

Data Management + Analytics

Synthesis of Aclima and integrated third party data to derive insights

Software Tools

Intuitive software tools for experts and citizens to drive action

Data integration for diagnosis + action

Wind, land-use, health data and more

In Partnership with Districts

Empowering rapid and effective AB 617 implementation, maximizing district resources and investment, supporting community engagement and responsiveness, and unlocking new science and innovation.



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT



South Coast
AQMD



In Partnership with Communities

Aclima's participatory development process engages community members directly in technology design.



Benefits of the Aclima Platform

Diagnose



IDENTIFY
HOTSPOTS &
SOURCES



UNDERSTAND
GREENHOUSE
GASES



REVEAL
EXPOSURE



INTEGRATE
LAND USE

and Act



TARGET
INTERVENTIONS



ENGAGE
COMMUNITIES



TRACK
PROGRESS

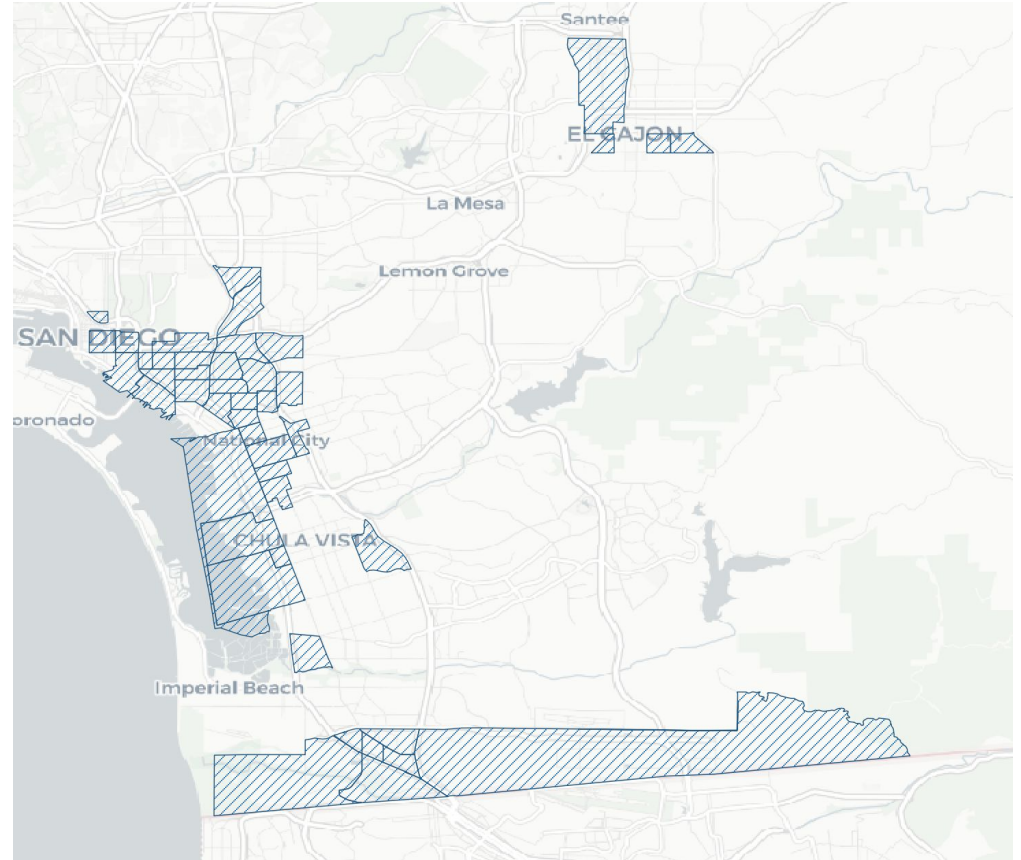


OPTIMIZE
INVESTMENT

Progress

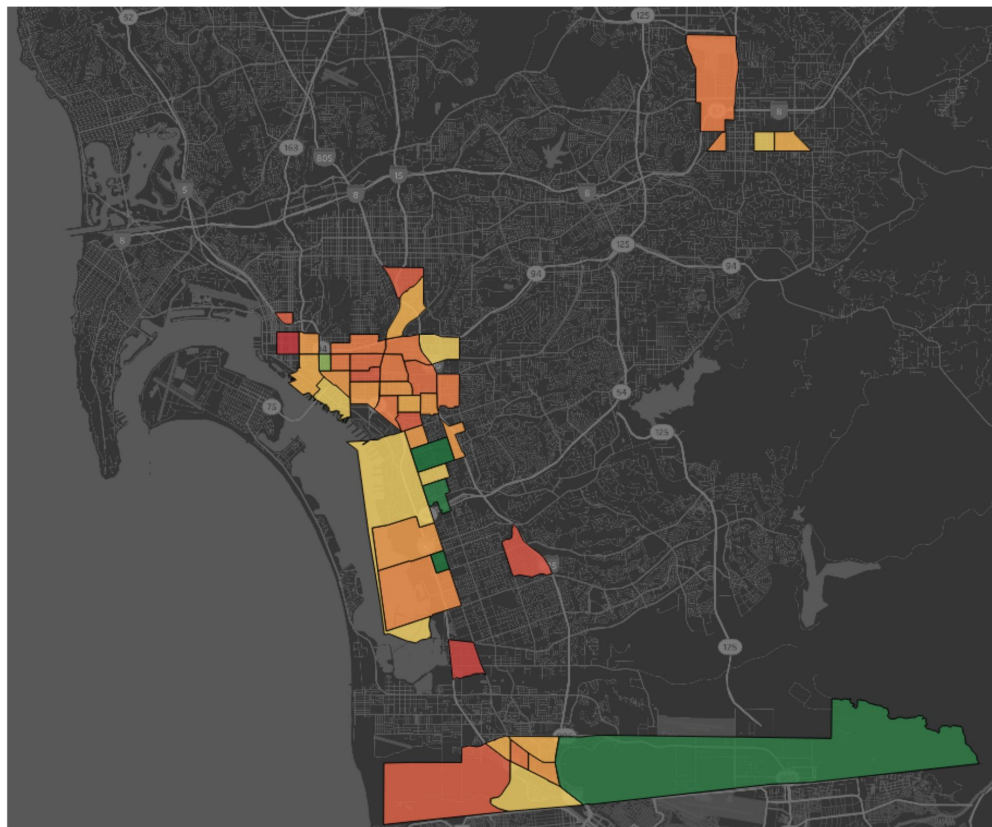
Summary Statistics March 1 - 30

- Mobile data collection began March 1, 2019
- 8,920 miles of data collection to achieve 20 runs in each of the 6 service areas
- Aclima completed 2,802 miles in March which equates to 31% progress
- As of March 30, each tract has been at least partially driven on average 7.4 times



Current Status

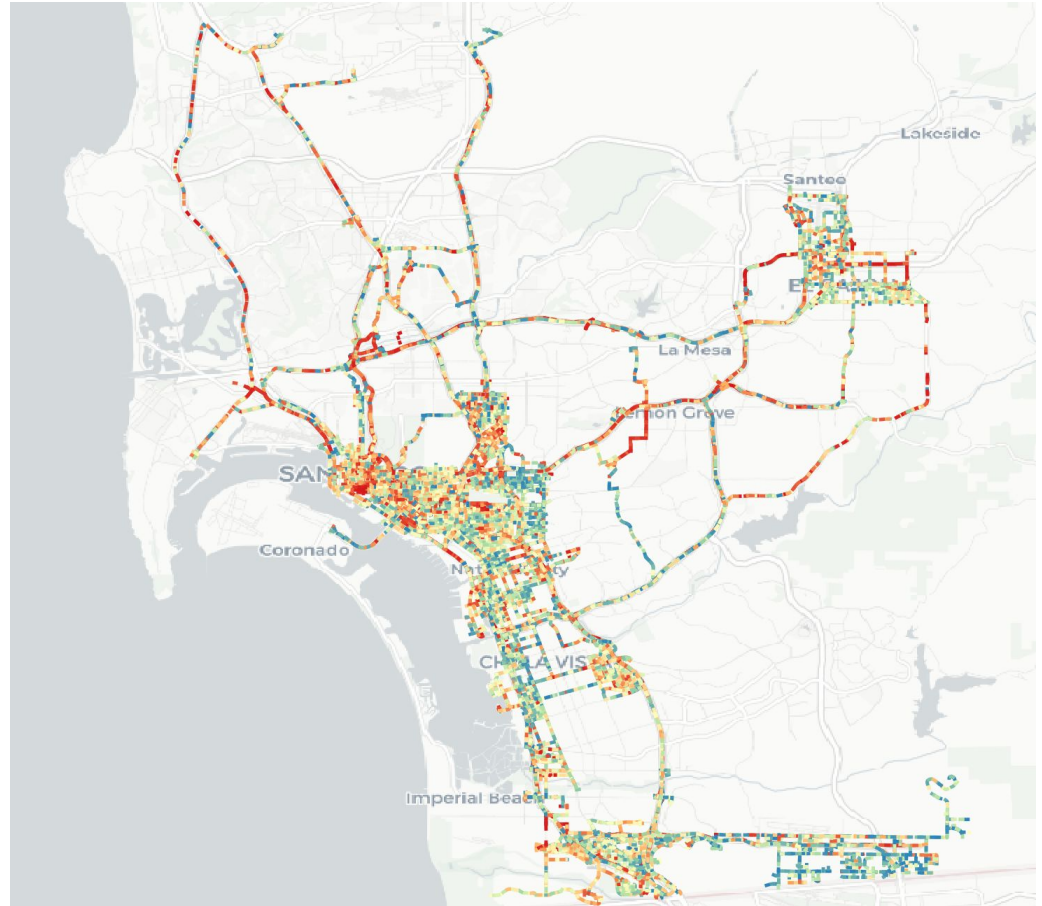
- On track for 20 runs by end of May/first half of June.
- Redder tracts have more complete runs, greener tracts have fewer complete runs.



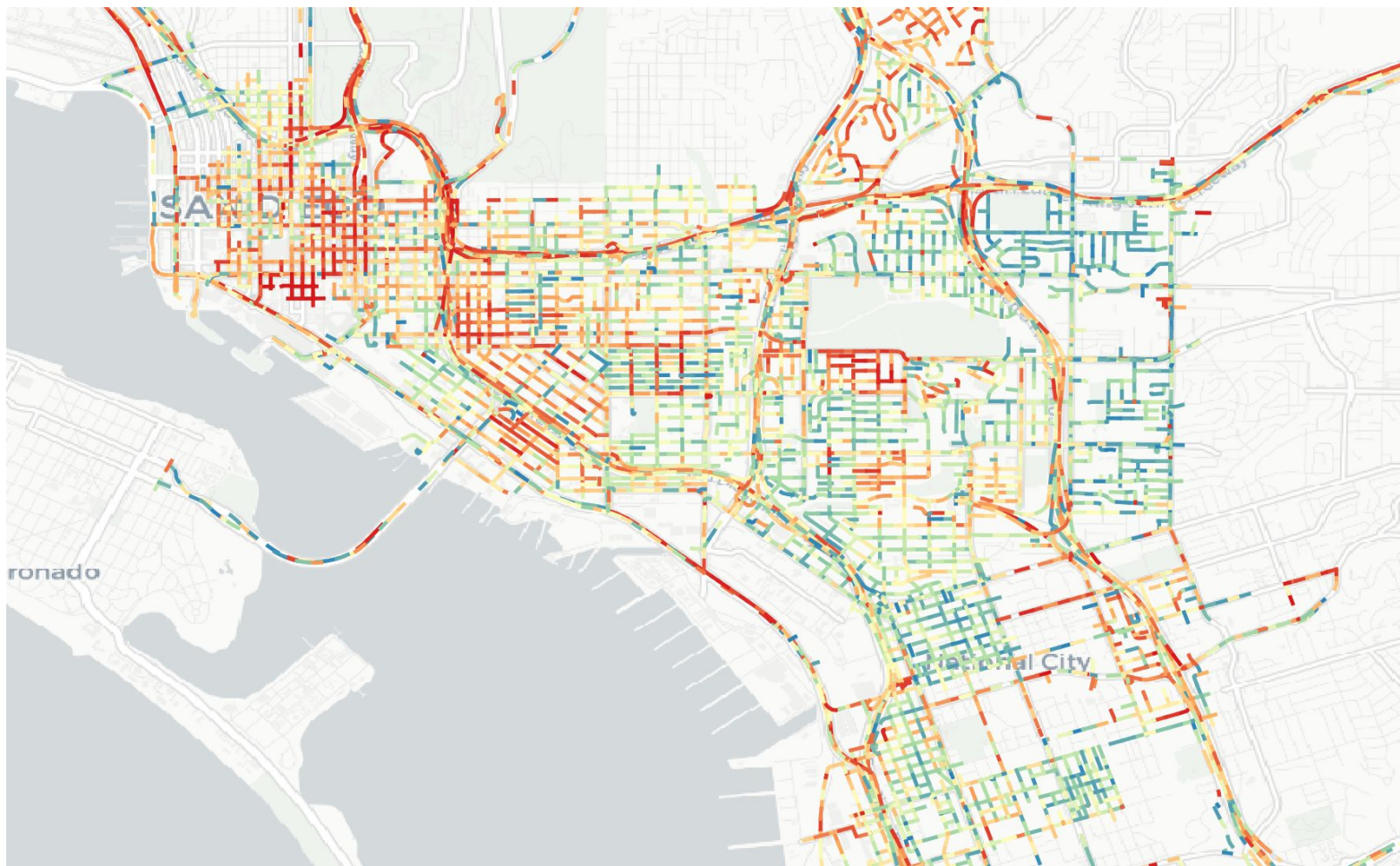
Initial Findings

Preliminary Mean Black Carbon aggregated by road segment

— 0 μm^3 to
— 6.0 μm^3

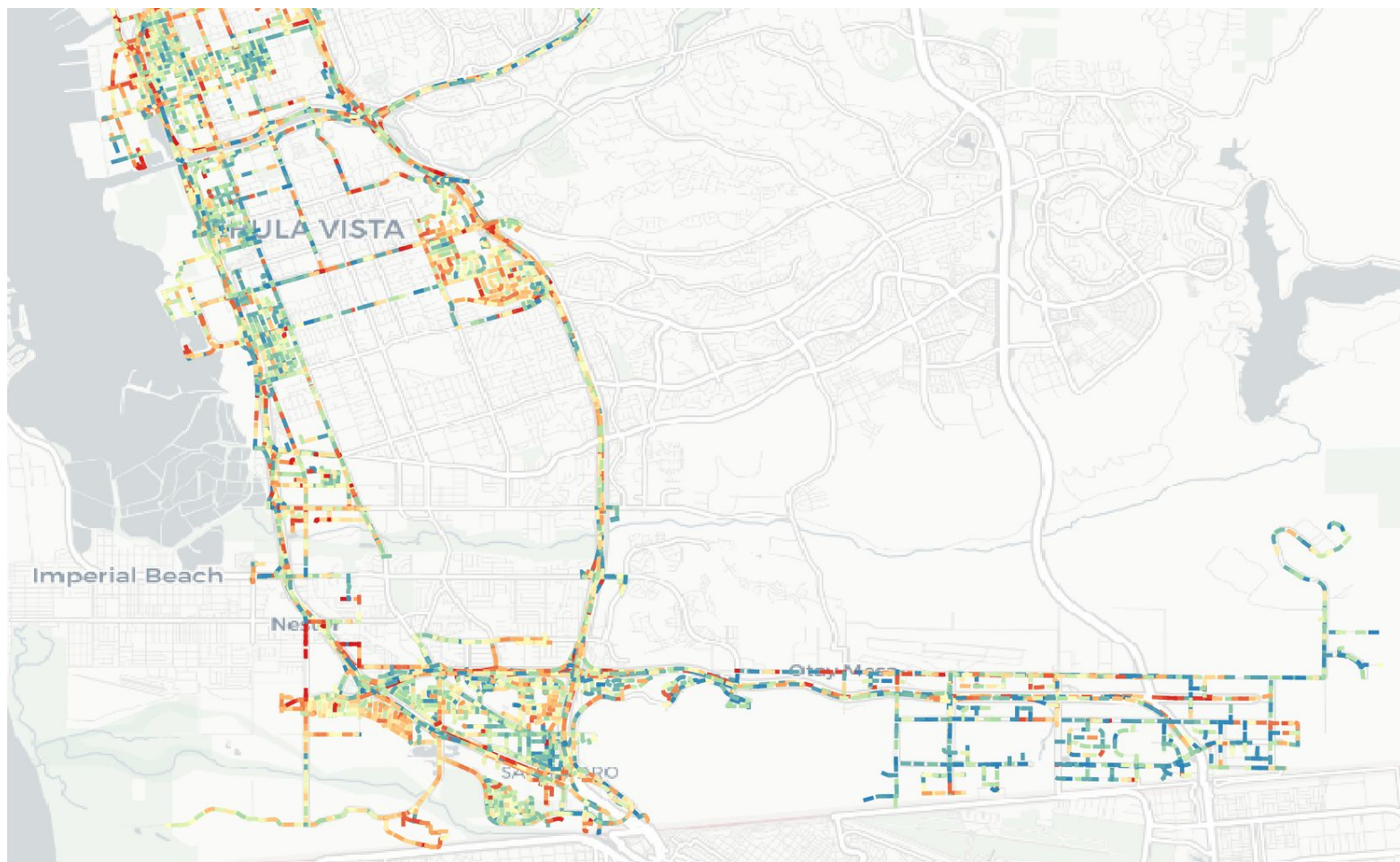


* Data may not be representative until collection has been completed



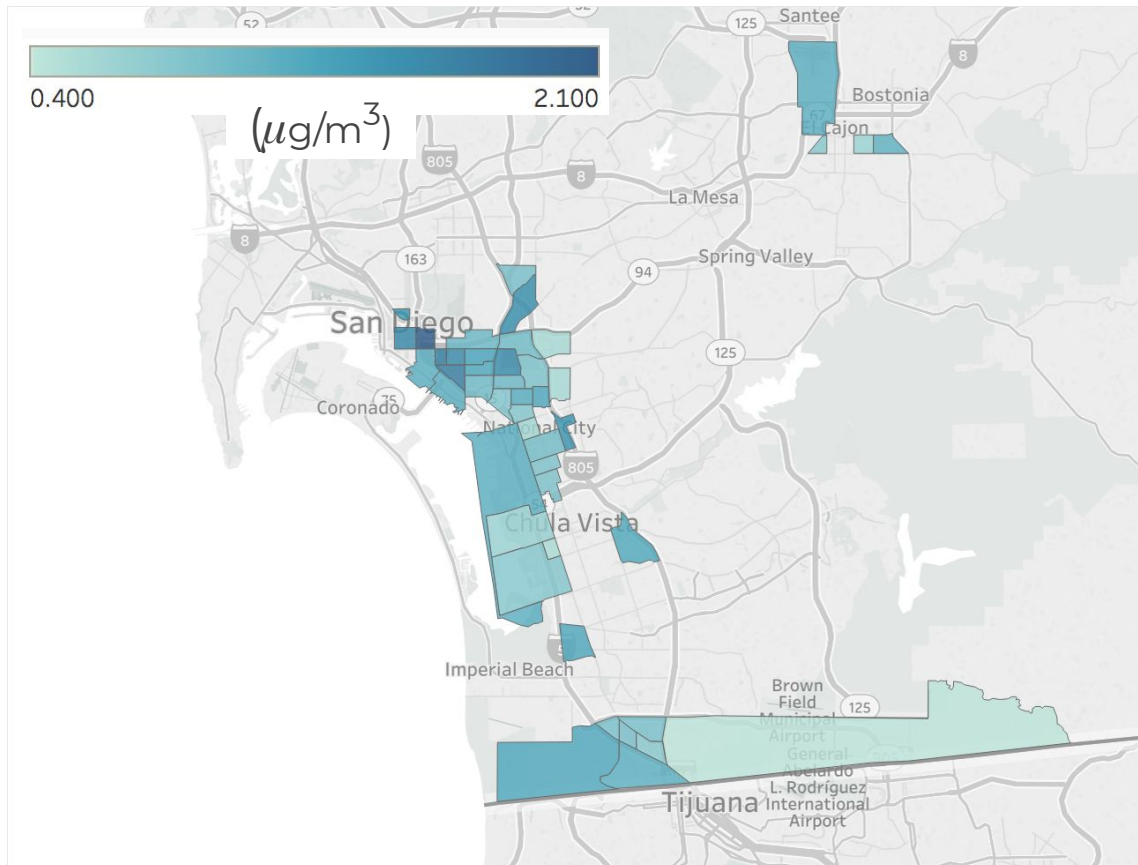
— 0 μm^3 to
— 6.0 μm^3

* Data may not be representative until collection has been completed



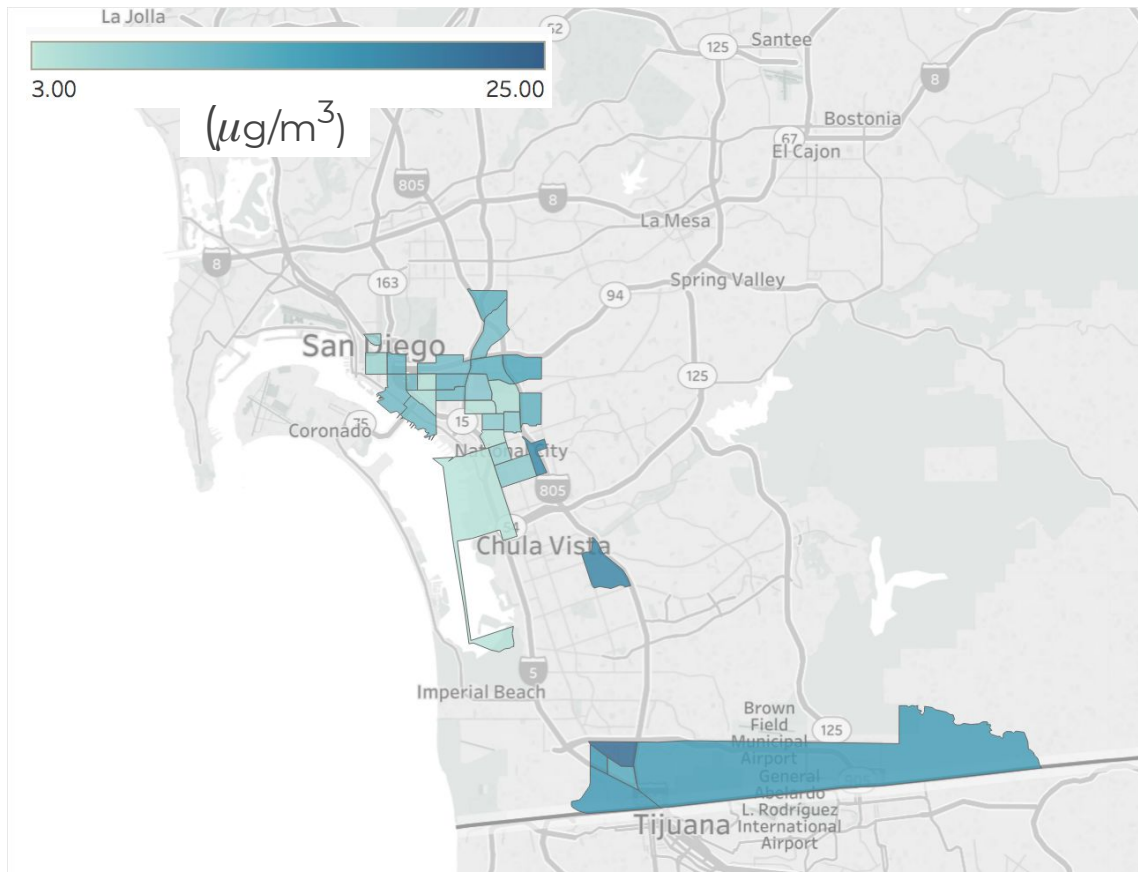
* Data may not be representative until collection has been completed

Preliminary Mean Black Carbon aggregated by census tract



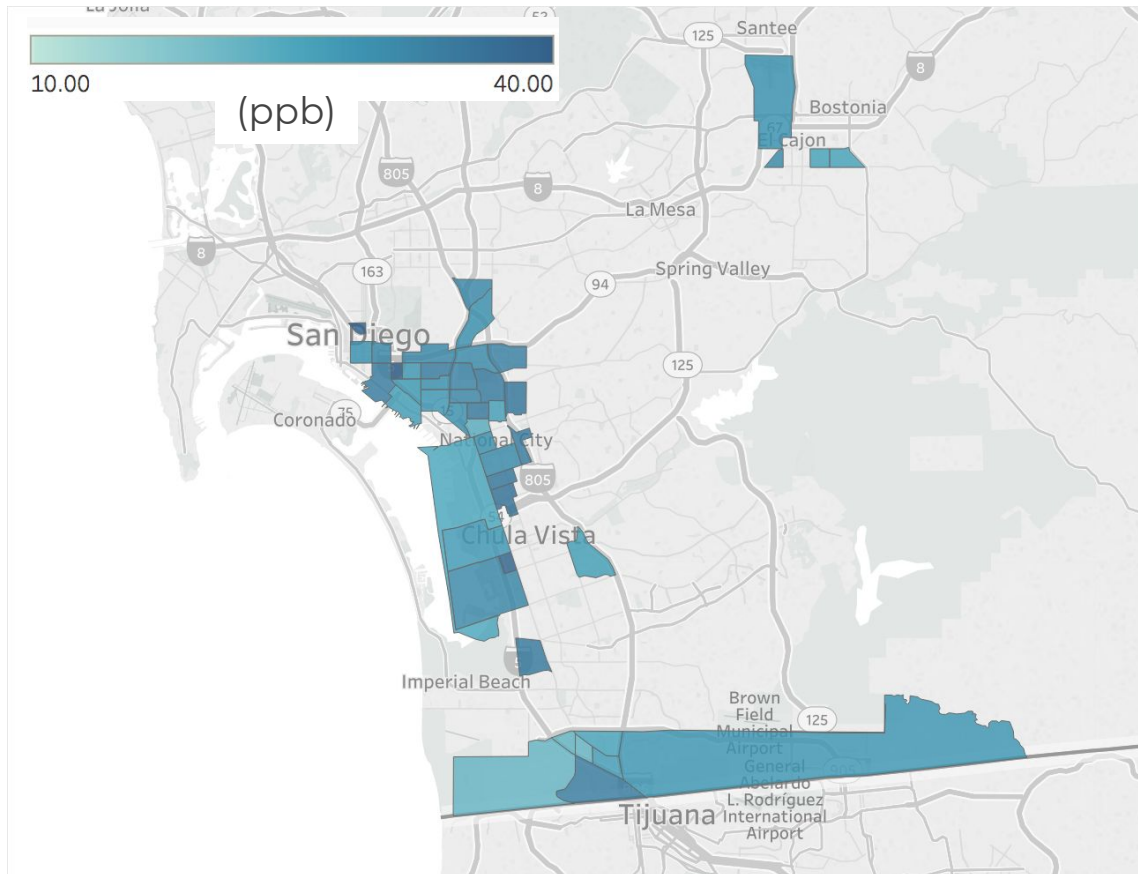
* Data may not be representative until collection has been completed

Preliminary
Mean
PM 2.5
aggregated by
census tract



* Data may not be representative until collection has been completed

Preliminary Mean Ozone aggregated by census tract



* Data may not be representative until collection has been completed

