



**Storytelling and Air Monitoring:
A “Day in the Life” of an environmental justice
youth of color**

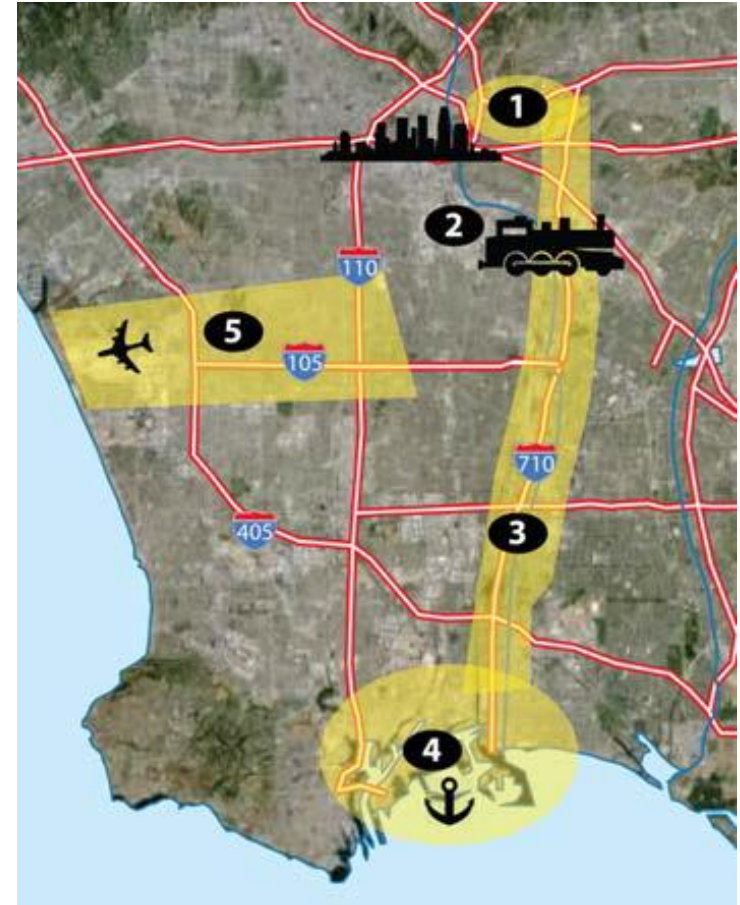
Jill Johnston, PhD
University of Southern California
Sept 13, 2018

Community Engagement Program

Based at University of Southern California

Bridge between scientists and the public on air pollution research

Significant engagement with EJ communities living near goods movement corridors



Goods Movements in Los Angeles



Local Concerns

Who is exposed?

How much is the exposure?

How to build expertise?

Trucks



Train



Cars



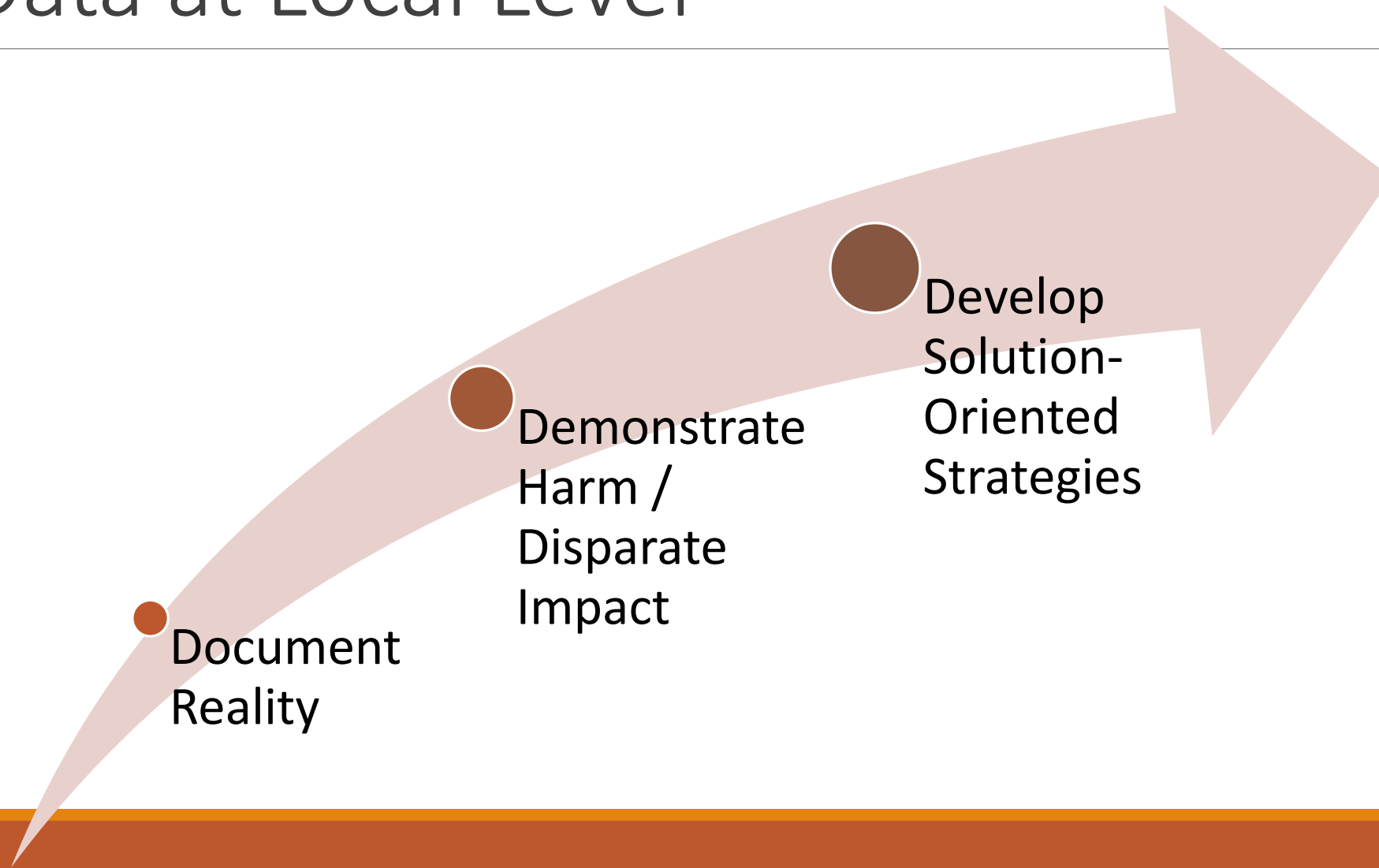
Goods / Ports



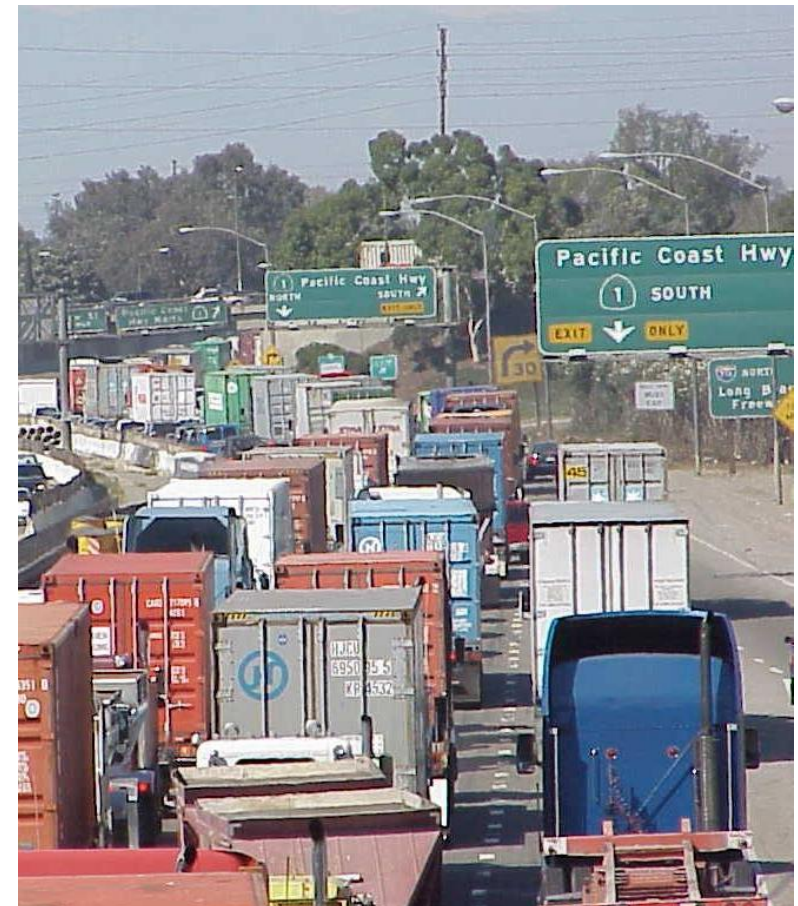
Oil drilling



Increasingly EJ Organizations Generating Data at Local Level



Building from Community Monitoring Teams



Partnership in Understanding Exposure, Burden & Lived Reality

- Increase capacity of local youth & Environmental Justice organizations to use and leverage air quality data and low-cost sensors to protect public health
- Focus on daily life
- Build community data & local expertise
- Assess cumulative impacts



South Central Youth Leadership Coalition



'Day in the Life' Project Goals

Build environmental health & justice literacy among high school youth

Generate community- owned data

Increase awareness of potential exposure at the individual & neighborhood level

Approach

Air Pollution &
Our health
Workshop

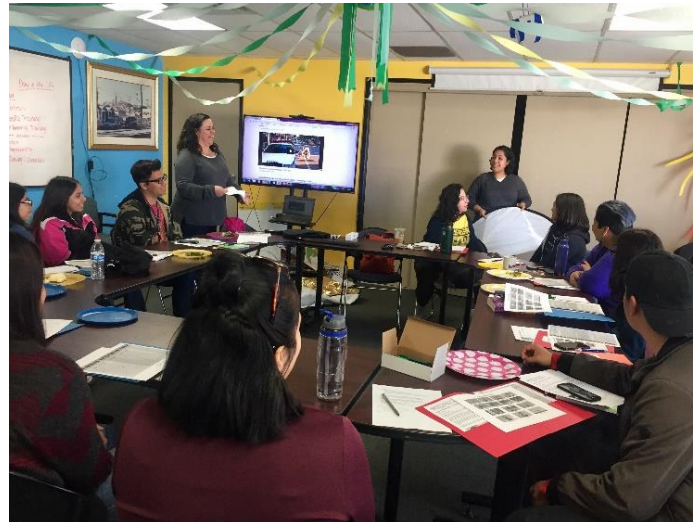
Storytelling for
Social Change

Air Pollution
Monitoring

Organizational
Report back

LA Youth EJ
Summit

- 25 youth
- 4 neighborhoods
- 3 community-based organizations



The Tools: Air Beam (& Manual)



The Tools: Story Map

Environmental Health Centers

A Day in the Life

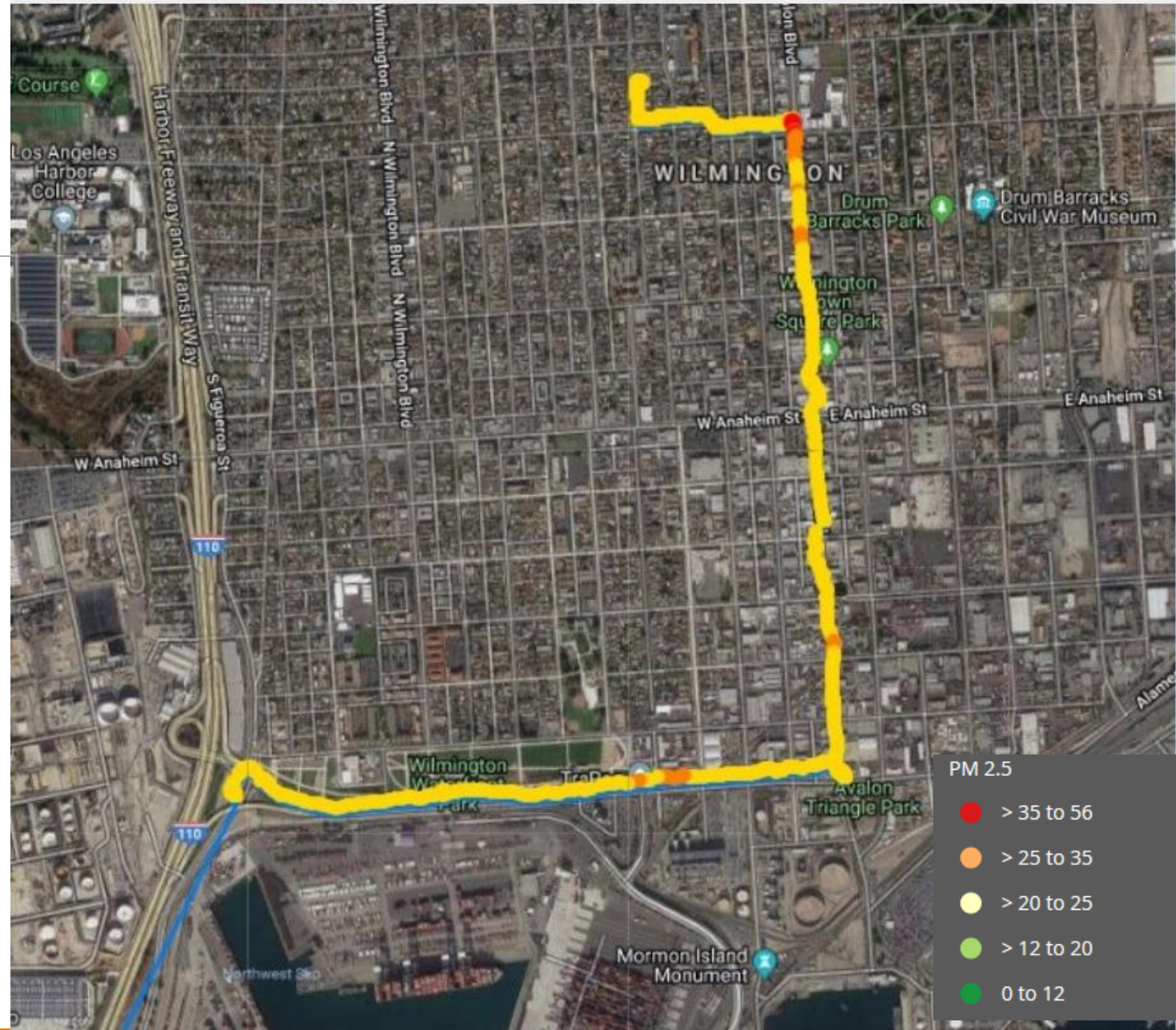
Ashley Solorio

Communities for a Better Environment
Port of Los Angeles High School, Wilmington
Age: 17

Ashley Solorio, lives in Wilmington, CA, where there are many refineries and fracking areas. To Ashley, this is why the work of Communities for a Better Environment (CBE) is so important. Ashley first learned of CBE at her school, Port of Los Angeles High School. She has been attending CBE at and outside of school for about a year and is excited to continue to fight for a better environment.

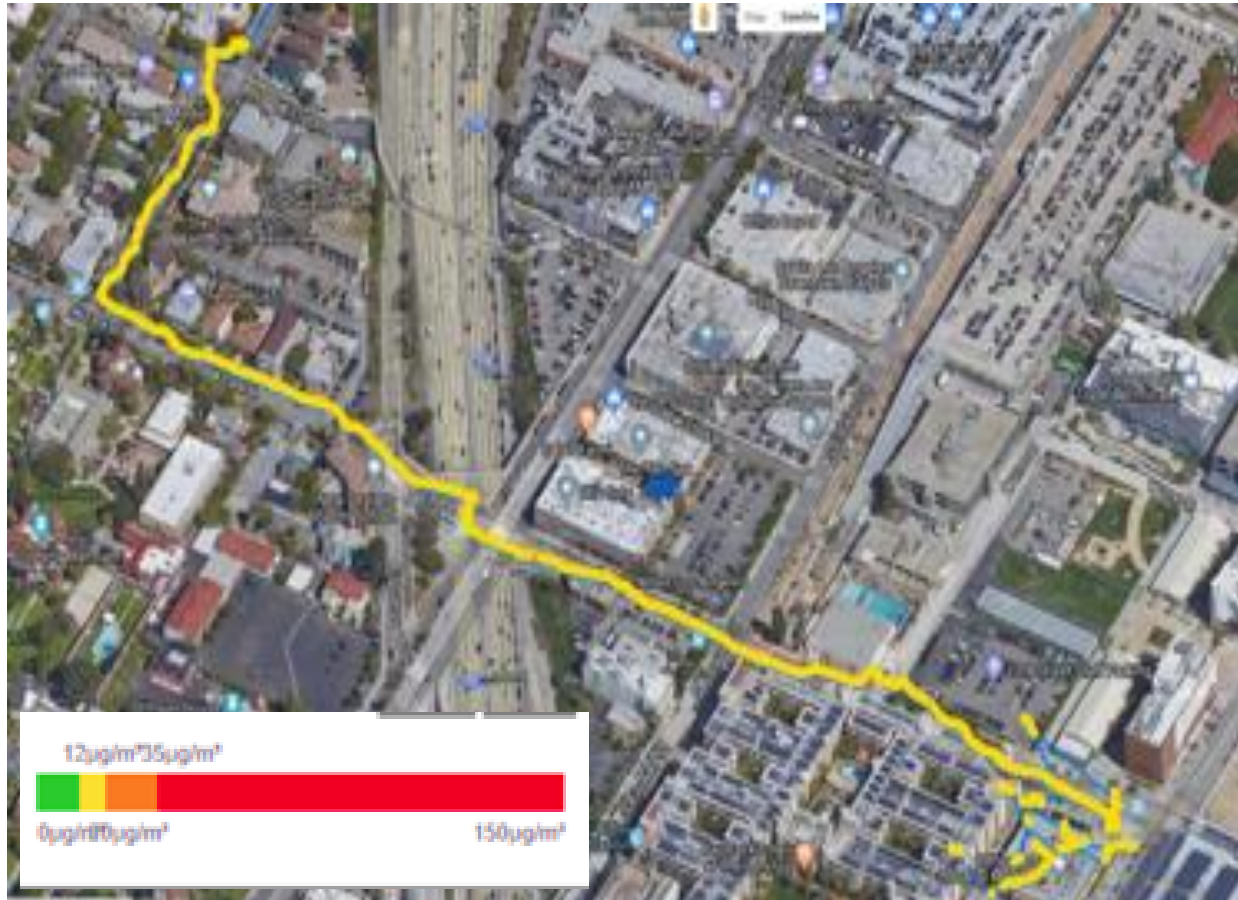
"I took part in a program with USC to help track the air quality in my community. After walking around Wilmington and San Pedro with an air monitor, I was surprised with the results."

Map description: After walking around Wilmington and San Pedro with an air monitor, I was surprised with the results. On the map shown, you are able to see one of my routes to school. The yellow and orange indicate the higher levels of fine particulate matter in the air. This was shocking to see."





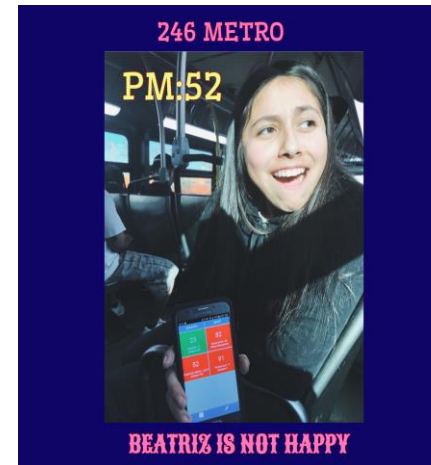
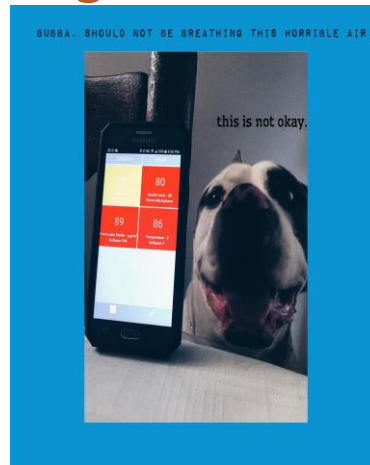
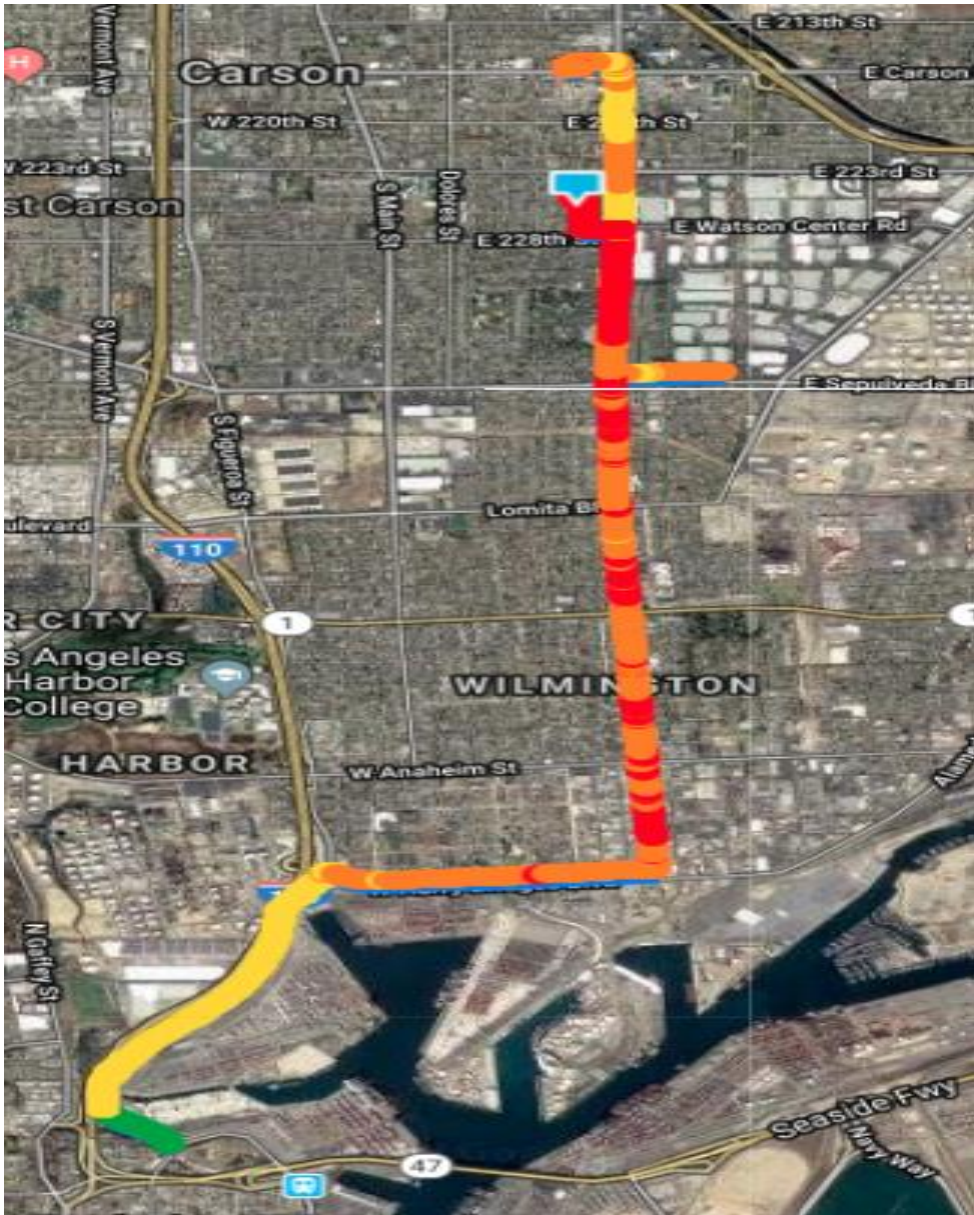
Voices: Katherine, age 16



In my walk I get a lot of exposure to different things like the freeway, I pass by the 110 [freeway] every day. What stood out in my walk is that no one really minds that the freeway is there, even AllenCo, [oil drilling facility in the neighborhood] no one really questions what is behind the gates unless they know about it. This project made me feel that I want to spread the word, I want people to know what is going on in our community, they deserve to know and take part in what we are doing to stop oil drilling.”

Voices: Isabel, age 17

“My map is literally red and orange, and this is my daily routine as I take the bus everyday coming back from school.... I am surrounded by factories, refineries, and ports. I breathe the toxins that go in and out of my body every day. Low-income communities also face environmental racism. Our neighborhoods are filled with people with diseases and our government does not do anything”



Voices: Ashley, age 17



“I decided to focus my images on the pollution happening around our parks. These are only two parks that are near my home, where the refineries are visible, and you can see the particulate matter in the air. Many babies, kids, adults, and even animals breathe in this pollution that causes serious damage to one’s health ... I also presented at my class where I talked about my experience with the AirBeam and how along the refineries the particulate matter was really high.”



Building Scientific Literacy

- Trainings with USC and the community organizations gave members leadership opportunities and skills to advance advocacy campaigns for
- Participants feel they can use the studies and data in their campaigns, and find their own data to inform action
- Discuss the limitations of scientific studies and air monitoring devices
- Exploring use of other low-cost sensors
- Relationship among youth in LA



Lessons & Thoughts

- An interactive tool that can be personalized to local concerns
 - Use air monitors with personal storytelling tools, grounded in lived experience
- A visual way to advance the discussion about PM in communities and sources
 - Immediate feedback
- Training and troubleshooting is essential
 - Multiple days of collaborative workshop, analysis and evaluation
- Complexity in PM_{2.5} in urban basin – does not necessarily identify pollution hot spots (e.g. diesel)
- Need to bring in conversation on indoor air quality

Acknowledgements

Communities for Better Environment

South Central Youth Leadership Coalition

Promoting Youth Advocacy / Asian Pacific Islander Forward Movement

LAGrit Media

USC Community Engagement Program on Health & the Environment



Population Vulnerability

