Solutions for a Greener & Healthier Environment in Richmond

Joel I., Jacob R., Angel C., Karely P., Celina M., Dafne R., Mario R.









Meet the Team!















Mario

10th Grade

Leadership High
School

10th Grade Invictus of Richmond

Karely

Angel
9th Grade
John F. Kennedy
High School

10th Grade John Henry High School

Dafne

10th Grade Richmond High School

Celina

10th Grade Making Waves Academy

Jacob

9th Grade John Henry High School

Joel

Agenda

02 03 01 04 Research **About About YPAR** Methods Question **Richmond** 05 06 07 80 Data & Results Limitations Recommendations **Analysis**

Our YPAR Program

(Youth Participatory Action Research)

2019

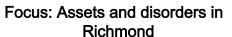


2020



2021







Focus: Access to healthy foods in Richmond



Focus: Deterrents in recreational areas in Richmond



Our 2022 YPAR Team



Networking & Socializing



Community Research



Community Service



Lab and College Tours

About Richmond

1941



WWII Richmond Shipyards

2012



Chevron refinery Explosion

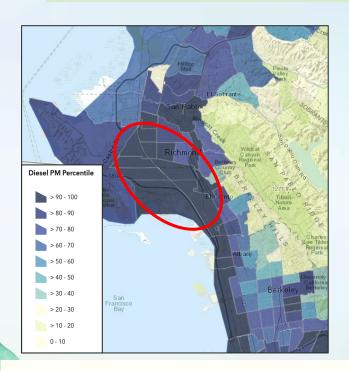
2020



Wildfires in California

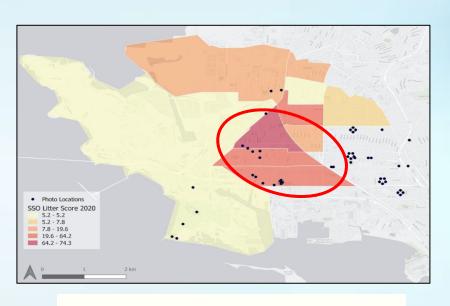


Environmental Disorders



Air pollution (diesel particulate matter)

Source: CES 4.0



Map of litter in the Richmond area

Source: YPAR 2019 Cohort



Health Disparities: Asthma

Richmond has <u>double</u> the asthma prevalence of California

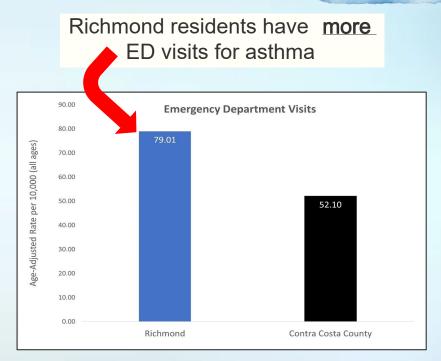


Richmond/San Pablo

vs



California



Source: Office of Statewide Health Planning and Development, 2013-2018



Health Disparities: Heart Disease

There are higher rates of heart disease in Richmond



Heart Disease

19.4

14.6

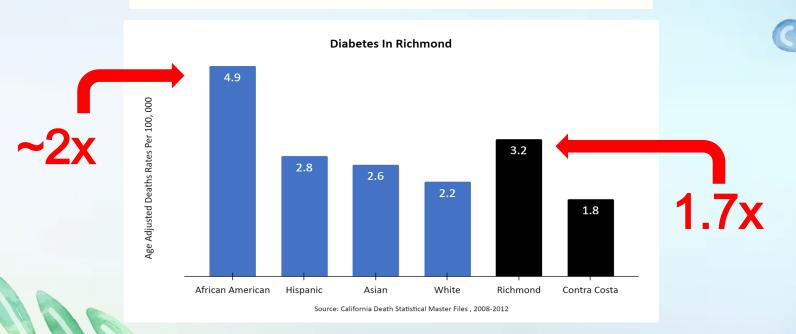
Source: California Death Statistical Master Files, 2008-2012

Contra Costa

Richmond

Health Disparities: Diabetes

Richmond has higher rates of diabetes



Source: California Death Statistical Master Files, 2008-2012



Our Research Question



What interventions can benefit health and wellness by improving environmental disorders in areas that the Richmond community uses often?



Environment



Health & Wellness



Defining our Research Question





Physical, mental, emotional, social, spiritual well-being; absence of disease

What interventions can benefit health and wellness by improving environmental disorders in areas that the Richmond community uses often?

Litter/trash
Lack of green space or trees
Poorly maintained spaces
Poor streetscapes
Pollution
Illegal activity





Why We Created This Project

Our Goals

- Hear from the community about what interventions they want to see
- Get 250 surveys in one week
- Improve health and wellness in Richmond by addressing environmental disorders

Our Rationale

- Bring awareness to issues in our communities and improve overall health within disadvantaged communities.
- More community research is needed
- We have a personal connection with these environmental and health issues

Our Target Population

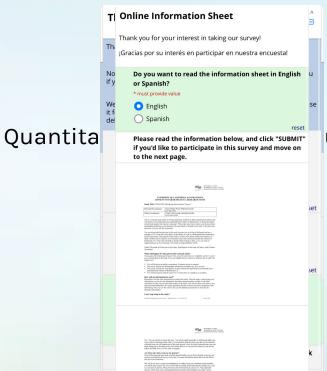


Who was eligible?

- Richmond residents: Adults and Youth (13-17)
- Richmond community based organizations



Our Research Method: Surveys



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3

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Our Research Method: Snowball Sampling

Snowball Sampling

- Chain reaction
- More respondents

How it benefited us

- Fast and efficient results
- Helps us gather more responses

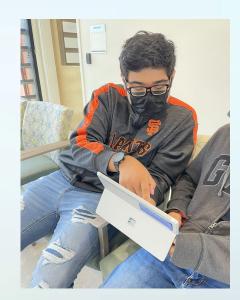


Recruitment and Data Collection

Social Media



Lifelong WJHC



Visited 21 places in the Community



Where in the community we went to

- Nevin Center*
- Cesar Chavez Elementary
- RYSE center
- The Latina Center
- The North Richmond Baptist Church*
- Metro
- Walgreens
- Starbucks
- Richmond Senior Center
- Laundromats
- Richmond Library

- Contra Costa College
- CVS
- Steege Elementary*
- Marina Bay
- Bakery seronas
- Richmond Art Center
- La Raza Market
- Andy's donuts
- Serrano's Bakery
- Peet's Coffee



Pre-data collection: Preparing Ourselves

- 1. Learned how to create a survey
- 2. Made a script to introduce our survey in Spanish and English
- 3. Practiced our surveys with one another and with LifeLong staff

Script

Hola! Me llamo _____, tiene tiempo para tomar esta encuesta sobre cómo mejorar la comunidad de Richmond? Soy de YPAR que es un programa de investigaciones para jóvenes en Richmond y estamos enfocados en reconocer los problemas ambientales en Richmond para mejorar la salud. Queremos escuchar la opinión de nuestra comunidad sobre el ambiente y cómo mejorar la comunidad. Tienes 10 minutos para tomar la encuesta? En cuanto termine la encuesta puede recibir una tarjeta de regalo electrónica de \$5 por su participación.

Hi, my name is _____. Do you have some time to take this survey about improving Richmond's environment? I am from YPAR which is a youth-led research program and we are focusing on improving health by addressing environmental issues in Richmond. We want to hear our residents' opinions on the environment and how to improve the community.



Pre-data collection: Preparing Ourselves





Avoiding Bias in Our Research

Biased -

How great are these interventions to improve neighborhood quality?



Ensure questions are fact based

Unbiased -

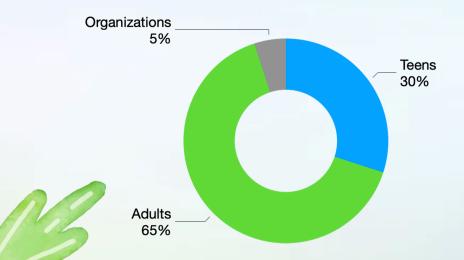
Do you agree or disagree with the following interventions to improve neighborhood quality?



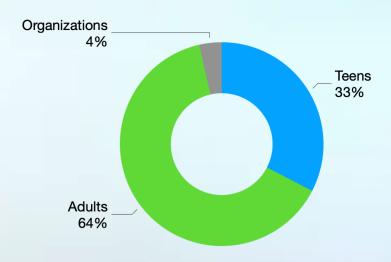


Data & Analysis

OUR GOAL 250 total surveys



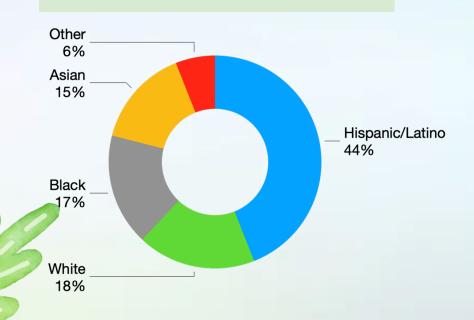
IN ACTUALITY 306 total surveys



Data & Analysis

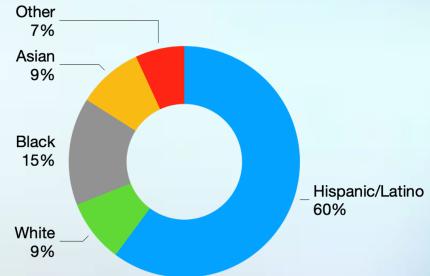


Racial-Ethnic Demographics in Richmond



IN ACTUALITY

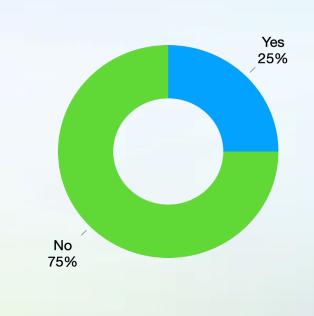
Racial-Ethnic Demographics in Our Surveys



Data & Analysis

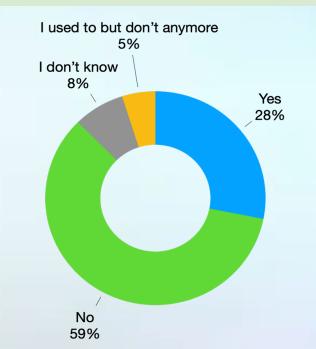
OUR GOAL

Asthma prevalence in Richmond



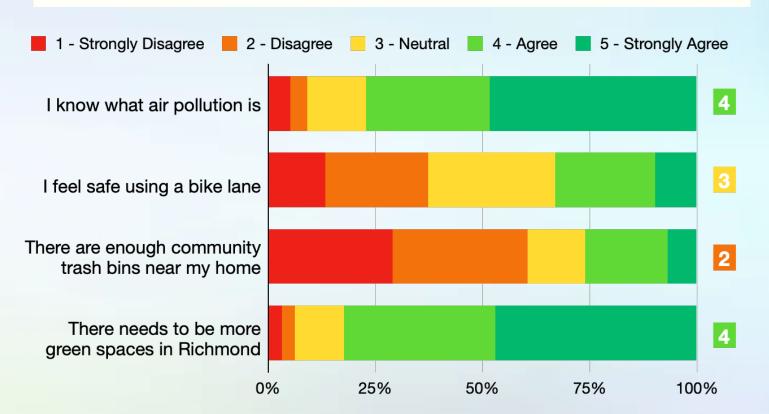
IN ACTUALITY

As thma prevalence among our participants



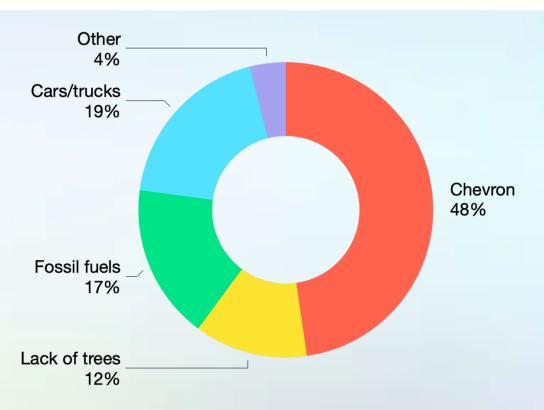
Results

Do you agree or disagree with the following statements?



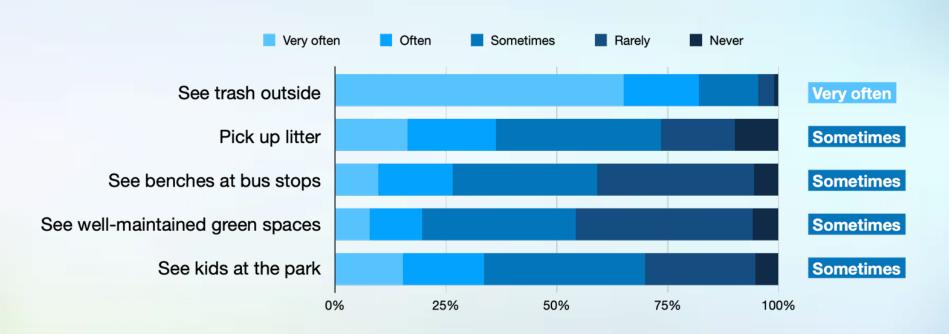
Results

What do you think is a major cause of air pollution?



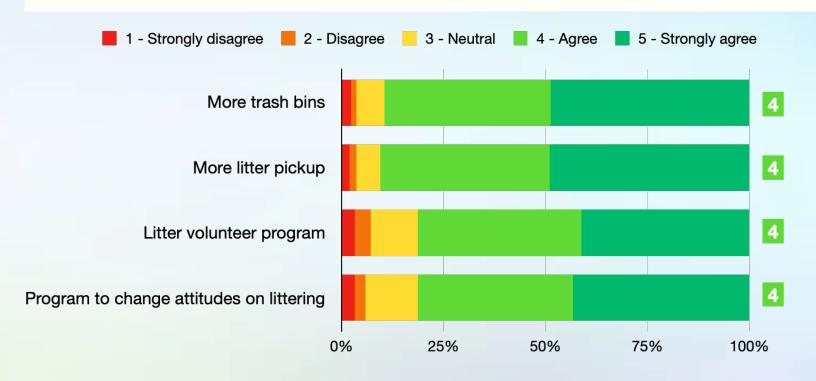
Results

How often do you do and see the following in Richmond?



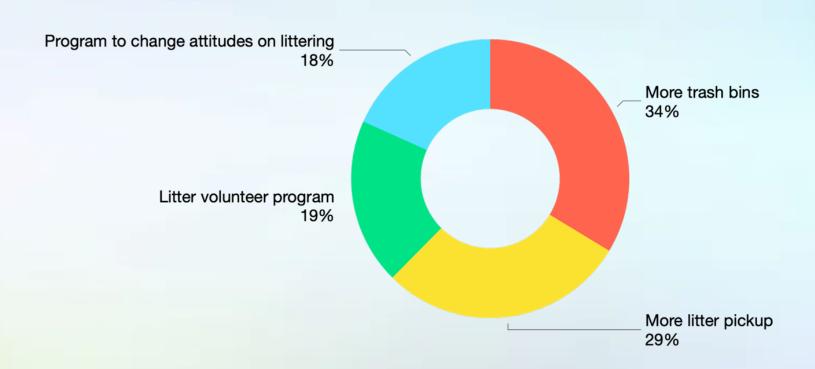
Results - Addressing Trash

Do you agree or disagree with the following interventions to address trash?



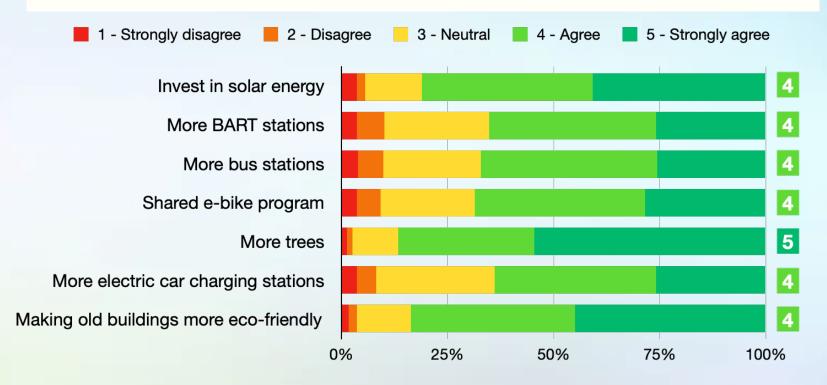
Results – Addressing Trash

Which of these interventions do you prefer the most?



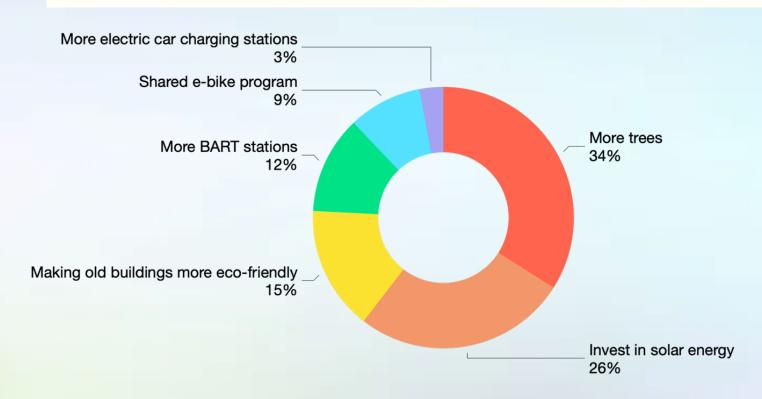
Results – Addressing Air Pollution

Do you agree or disagree with the following interventions to address air pollution?



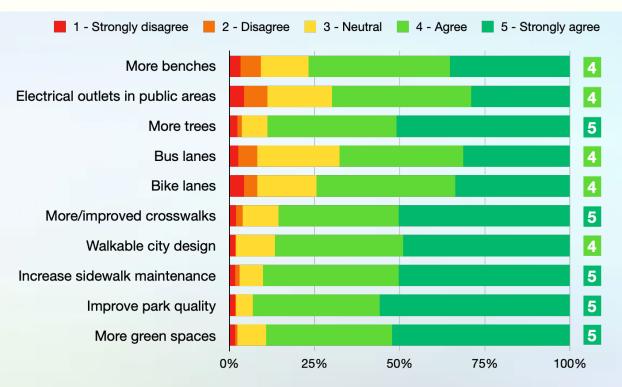
Results – Addressing Air Pollution

Which of these interventions do you prefer the most?



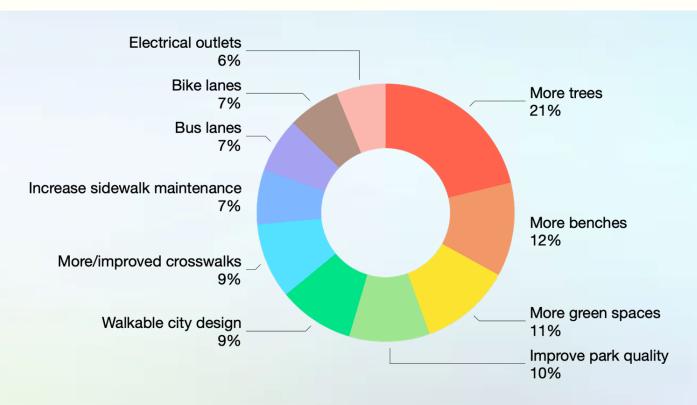
Results – Improving Neighborhood Quality

Do you agree or disagree with the following interventions to improve neighborhood quality?



Results – Improving Neighborhood Quality

Which of these interventions do you prefer the most?





Our Recommendations to Stakeholders

More trash bins

To Address Trash



Plant more trees

To Address Air Pollution



More green spaces with trees and benches

To Improve Neighborhood Quality



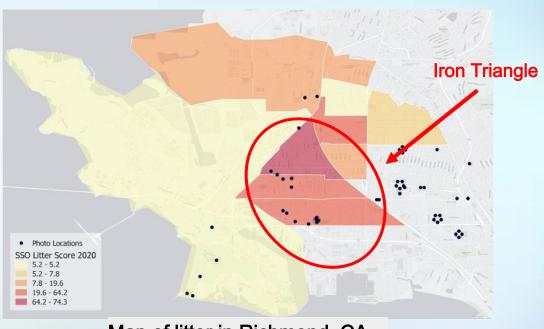
Our Plan for Addressing Trash



Increase Trash Cans

Make sure to have one trashcan per block in the Iron Triangle



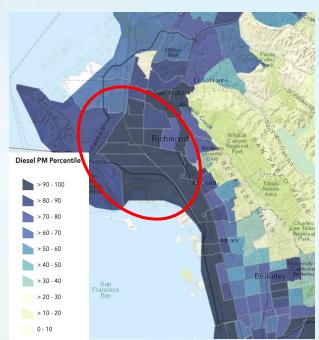


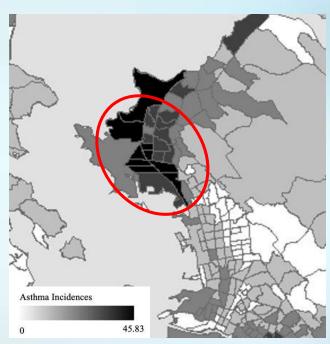
Map of litter in Richmond, CA
Credit: YPAR 2019 Cohort

Our Plan for Addressing Air Pollution

Plant more trees







Air Pollution (diesel particulate matter)

Credit: CES 4.0

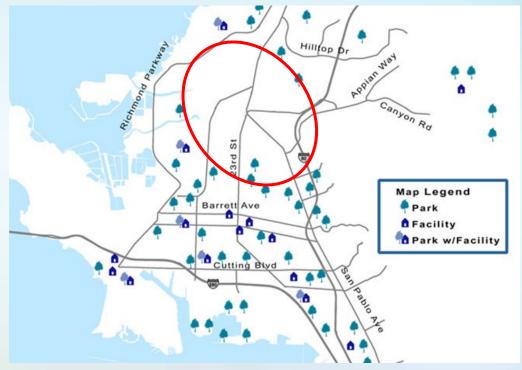
Child ER visits due to asthma

Credit: Sturla McNair Scholars 2021

Our Plan for Addressing Neighborhood Quality

More green spaces with trees and benches





Source: Richmond Parks and Facilities

Challenges and Limitations

- COVID-19 Pandemic
- Internet connection
- Time
- Uncompleted surveys



Our Personal Takeaways



A special thank you to...







Thank you to all the Community Based Organizations that supported us.

Lifelong team: Dr. Omoniyi Omotoso, Jennifer Mourelatos, Mrs. Flores

UCSF/UCB Team: Dr. Neeta Thakur, Dr. Rosemarie De La Rosa, Cindy Curiel, Daniel Correa Bucio, Jackie Ledesma, John McGinley

References

- https://www.census.gov/quickfacts/rmond
- https://sites.google.com/g.ucla.edu/uclaheatmaps/map?authuser=0
- https://calisphere.org/exhibitions/37/richmond -shipyards/

Thank you! Any Questions?