

Clean Mobility Options Voucher Pilot Program (CMO)

Yoots - Richmond Community Transportation Needs Assessment

Summary Report

September 2021

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Acknowledgements

This needs assessment and summary report were funded by Clean Mobility Options (CMO), which is part of California Climate Investments (CCI), a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment - particularly in historically underserved communities. CMO is a statewide initiative that provides funding for zero-emission shared mobility options to historically underserved communities in California. CMO is available throughout California to eligible underserved communities, as well as eligible low-income tribal and affordable-housing communities, to increase access to safe, reliable, convenient and affordable transportation options.

Executive Summary

The Yoots - Richmond Outdoors Coalition transportation community based needs assessment was conducted between March-September 2021 to assess current transportation options and gaps to outdoor spaces for people living and working in Richmond communities (particularly youth and families) who have been historically underrepresented in transportation planning and the outdoors. This project was a partnership between the following Richmond Outdoors Coalition Partners: Youth Transportation Organization (Yoots), Rich City Rides, the Watershed Project, YES Nature to Neighborhoods, Inclusion Outdoors, and UC Berkeley's Lawrence Hall of Science,

There were three components of our needs assessment:

1. Review of publicly-available online information on transportation access and demographics in Richmond
2. A survey administered to a sample of community residents
3. A series of focus groups with community members and community based organizations

We focused on gathering information from 7 target neighborhoods that have been historically underserved:

1. Atchison Village & Central Richmond
2. Beldingwoods
3. Iron Triangle
4. Metro Richmore Village, Park Plaza, Cortez-Stege, Laurel Park, Pullman
5. Unincorporated North Richmond
6. Richmond Annex, Panhandle Annex & Southwest Annex
7. Parchester Village

Lessons Learned

Lesson Learned #1: Findings from online research, survey, and focus groups illustrate the importance of solutions being low or no-cost to users, safe, and time-efficient.

Lesson Learned #2: Participants also expressed the need for any solutions to be accessible: available to all community members, usable to individuals with limited mobility, and well-advertised.

Insights/Successes

Insight/Success #1: The survey and focus groups revealed strong support among community members for community-organized events to outdoor recreation activities and locations of interest. Survey participants were asked, "if local organizations offered free transportation to participate in their programming locally at locations like a state park and beach, would your family participate more frequently?" A staggering 88.5 percent of adult respondents and 72.2 percent of youth participants replied affirmatively.

Insight/Success #2: Throughout project planning, the project team participated in weekly discussions and professional learning sessions on the [characteristics of white supremacy culture and antidotes to white supremacy](#) (Appendix G) that the project team could implement together. One of the

characteristics of white supremacy culture that the project team worked to combat in conducting this needs assessment is the idea of “quantity over quality.” The project team felt very strongly that it was more important to collect information from the right people (emphasize “quality”), rather than simply collect surveys from the largest possible number of people (“quantity”) irrespective of whether these participants represented the Focus Communities.

Introduction

This Summary Report links the mobility needs found in Richmond's Community Transportation Needs Assessment (CTNA) with potential mobility solutions

Project Background

The purpose of this project was to conduct a community needs assessment on current transportation options and gaps to outdoor spaces for people living and working in Richmond communities (particularly youth and families) who have been historically underrepresented in transportation planning and the outdoors. Our needs assessment included hearing from youth, families and leadership from local community based organizations that provide programs and services to gather information about their transportation needs and evaluate some potential solutions. We aimed to better understand how people currently travel to outdoor recreation locations, what modes of transportation are used to access different destinations, and what destinations people would like to travel to, but cannot access due to gaps in transportation choices.

The collective end goal of the partners on this project is that more people have access to nature. We know that transportation is a gap -- for individuals and for the organizations that get those individuals out to nature.

Our needs assessment was based on a theory of action that individuals are more likely to access the outdoors via community organizations, and thus low cost transportation will allow organizations to get more people into nature. We wanted to know if community based organizations had access to vans (at low cost) would more people access the outdoors?

Project Team

Our project team consisted of the following partners:

Richmond Outdoors Coalition - Community Partners

- Rich City Rides
 - Organization partners: Alex Peter, Daniel Lanis, Najari Smith
 - Community Leaders: Robin (Shots) Lopéz, Lizbeth, Julio Miranda, Diego Alejo
- The Watershed Project
 - Organization partners: Paula White, Anne Bremer, Juliana Gonzalez
 - Community Leaders: Gabriela Suarez-Cruz, Javier Alejandro Garcia, Charlene Harris, Olivia Mejia
- YES Nature to Neighborhoods
 - Organization partners: Angelica Delgado, Joanna Pulido, Eric Aaholm
 - Community Leaders: Marcela Jaimes (who also provided translation services), Olga Calderon, Meliza*, Sara Madriz

**Community Leader under the age of 18*

The Richmond Outdoors Coalition organization partners and Community Leaders offered insight and guidance throughout the project, to ensure that the key community voices and perspectives were represented. They offered feedback on all components of the project, including the survey and focus group questions, the methods for gathering surveys, which individuals and groups to reach out to, how to best distribute gift cards, participation in the focus groups and discussion of the needs assessment findings.

Youth Transportation Organization (Yoots) - grantee/project advisor: Craig Flax

The Yoots grantee served as a project advisor to the partners and liaison with Shared Use Mobility Center (SUMC) and CMO technical assistance partners to ensure that we were meeting all grant requirements.

Lawrence Hall of Science - evaluation partners: Aujanee (Nae) Young and Sara Allan

Our evaluation partners supported us with our online data collection, survey creation, data analysis and summary report.

Inclusion Outdoors - project managers: Jenny Mulholland-Beahrs and Xiomara (Xia) Batin

Our project managers oversaw and supported the full project, including the timeline, meeting agendas and facilitation, meeting all grant deliverables and project outcomes.

Why a Community Transportation Needs Assessment

The target neighborhoods within our project area, including North Richmond, Iron Triangle, Parchester, Pullman, and Park Plaza, lack adequate public infrastructure and residents have less access to public transportation networks, have few safe bicycle and pedestrian pathways, and are burdened with high levels of air pollution. Residents, especially youth and families, face challenges in accessing services like healthcare and activities such as outdoor experiences, athletic programs, and other youth and family development programs. A high proportion of households do not own a private vehicle.

Prior to conducting this needs assessment, during initial conversations with local organizations that offer youth and family programming, they reported that transportation is the single biggest operational barrier they face in being able to provide a full range of program options. They cited cost, limited bus/van availability, and inconvenient public transportation options as barriers that make transportation the most expensive and difficult hurdle to overcome. This needs assessment explored ways to help youth and families, and the organizations that serve them, to address transportation as a barrier to accessing services and programs, and contributes towards finding ways to eliminate transportation as a barrier to equity.

History of environmental, social & economic challenges

A high percentage of the residents in the census tracts of our project area live below the poverty line and there are high levels of unemployment. This community suffers from a critical lack of access to healthy, green, public spaces and is located adjacent to the Port of Richmond, Chevron Refinery, BNSF railroad, I-580 Freeway and Richmond Parkway. The proximity of these industries and heavy vehicle traffic on the freeways and roads contribute to high levels of air pollution. Many local residents, especially children, suffer from asthma, and asthma has been identified as one of the top concerns in the community. Other chronic health conditions that are disproportionately impacting low-income people in Richmond include obesity and diabetes. In 2015, Contra Costa County Health Services published a report on the impact of sugar sweetened beverages on the health of Richmond residents which showed that 58% of adults and 52% of children are obese or overweight. A project that focuses on increasing access to clean mobility options will contribute to improving air quality. Our goal is also to improve transportation options for youth and families so that they can access services and programming, including parks and open space which will improve overall health and wellbeing for residents by increasing opportunities for physical activity and other benefits of time spent in nature, including growth in adventure and exploration, self-esteem, independence, leadership, friendship skills, environmental awareness, and supportive relationships.

Areas of Investment and Disinvestments

Richmond, California has a long history of inequitable and racist design and development. From the WWII era rebirth of this city, its design, engineering and maintenance services were explicitly shaped with race in mind. This racial design lens manifested itself in a constellation of inadequate public infrastructure in the city's historically black neighborhoods. (Specifically, Parchester Village, North Richmond, Iron Triangle, Santa Fe, Coronado, Pullman and Park Plaza neighborhoods). Because of this explicitly racist history wherein the landscape was designed, these communities of color have older engineering, less bicycle and pedestrian facilities, less tree canopy, increased air pollution, increased heat island effect and an overwhelmingly disproportionate hospitalization rate increasing the isolation of these neighborhoods.

A study commissioned by the Crescent Porter Hale Foundation revealed an extreme disparity in grant dollars supporting funding for programs focused on serving adolescents within the San Francisco Bay Area. Contra Costa County, where Richmond is based, received dramatically lower grant funds than surrounding areas.

Funding for Adolescent-Serving Programs by County, 2014

Source: Foundation Center

County	Total Grant Dollars	Grant Dollars per Recipient	Total Funders
San Francisco	\$44MM	\$250k	401
Alameda	\$40MM	\$300K	234
Contra Costa	\$6MM	\$180K	59

There have been investments throughout the city to address some of these inequities. For example, community groups, such as YES, The Watershed Project, Groundwork Richmond, Rich City Rides and other local partners have worked together on many community enhancements, such as several bike and pedestrian trails in the city, including the Richmond Greenway, San Francisco Bay Trail and Richmond Wellness Trail, as well as a newly opened bike trail on the Richmond-San Rafael bridge. The city also has a new ferry terminal to San Francisco, and a BART and AMTRAK station.

Project Area

Populations that have been historically underrepresented in community or transportation planning

Our assessment gave several populations that have been historically underrepresented in community or transportation planning opportunities to contribute their voices. This includes hearing from youth, and mono-lingual Spanish-speaking residents, two groups who have often been left out of previous planning processes. In addition, part of our project area falls within the unincorporated area of North Richmond. Since unincorporated areas fall outside of municipal boundaries, residents from these areas often have little say in transportation planning in their community and often don't have access to many of the services that incorporated areas have, including public transit and sidewalks.

Target neighborhoods

The communities the project intended to benefit, identified by six** census tracts and ranking score in CalEnviroScreen 3.0* are:

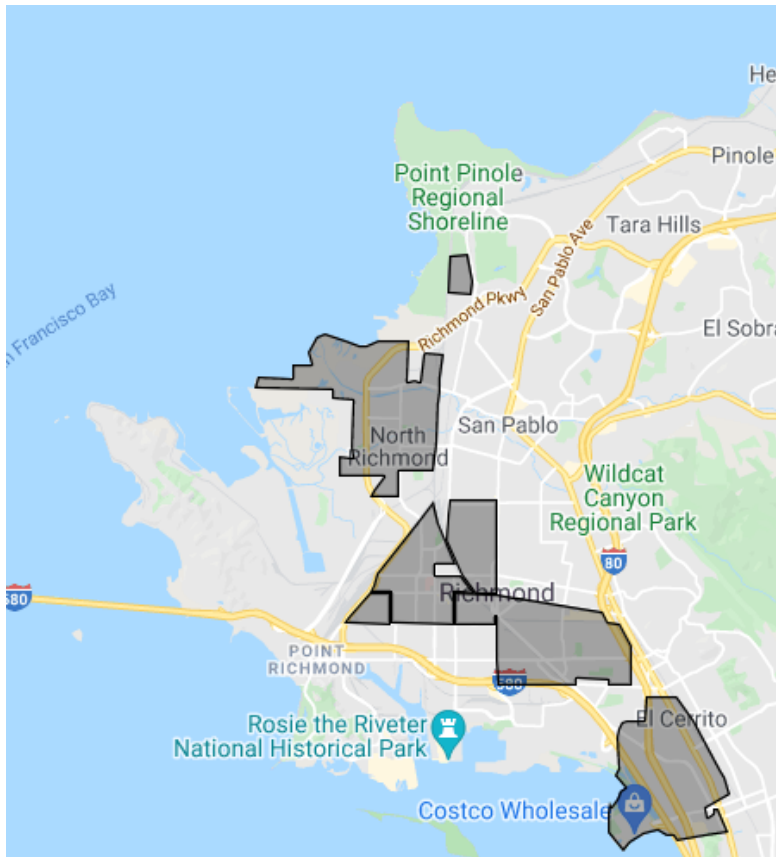
1. Atchison Village & Central Richmond
2. Beldingwoods
3. Iron Triangle
4. Metro Richmore Village, Park Plaza, Cortez-Stege, Laurel Park, Pullman
5. Unincorporated North Richmond
6. Richmond Annex, Panhandle Annex & Southwest Annex
7. Parchester Village**

**CalEnviroScreen identifies California communities by census tract that are disproportionately burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution*

***In addition to the first 6 census tracts, the team added the 7th census tract of Parchester Village after speaking with community leaders who identified it as a high priority area with gaps in access to transportation*

Combined, these neighborhoods cover an area of 24,517,257 square meters and are home to 50,039 people total. (source: [CMO CTNA map-Demographic info](#); [exported data](#)) Demographic information on the Focus Communities is available in the [Findings](#) section of this report.

The following map of Richmond shows the 7 target communities highlighted:



Target communities

Populations that have been historically underrepresented in community or transportation planning in Richmond, and thus who we focused on hearing from in this project include:

- Youth ages 14-17, young adults ages 18-25, adults (with families) ages 26+ whose voices are often underrepresented in transportation and city planning initiatives
- Families with children that do not have personal vehicles
- Female headed households who suffer disproportionately from poverty
- Spanish speaking households who have often been excluded from participating in planning efforts
- Households with incomes under \$30,000
- Latinx families who have the highest poverty rate in Richmond
- Undocumented populations that may not have driver licenses
- African-American families
- People with physical disabilities
- People with mental disabilities (who can't get a driver license)
- Indigeneous community
- People without health insurance

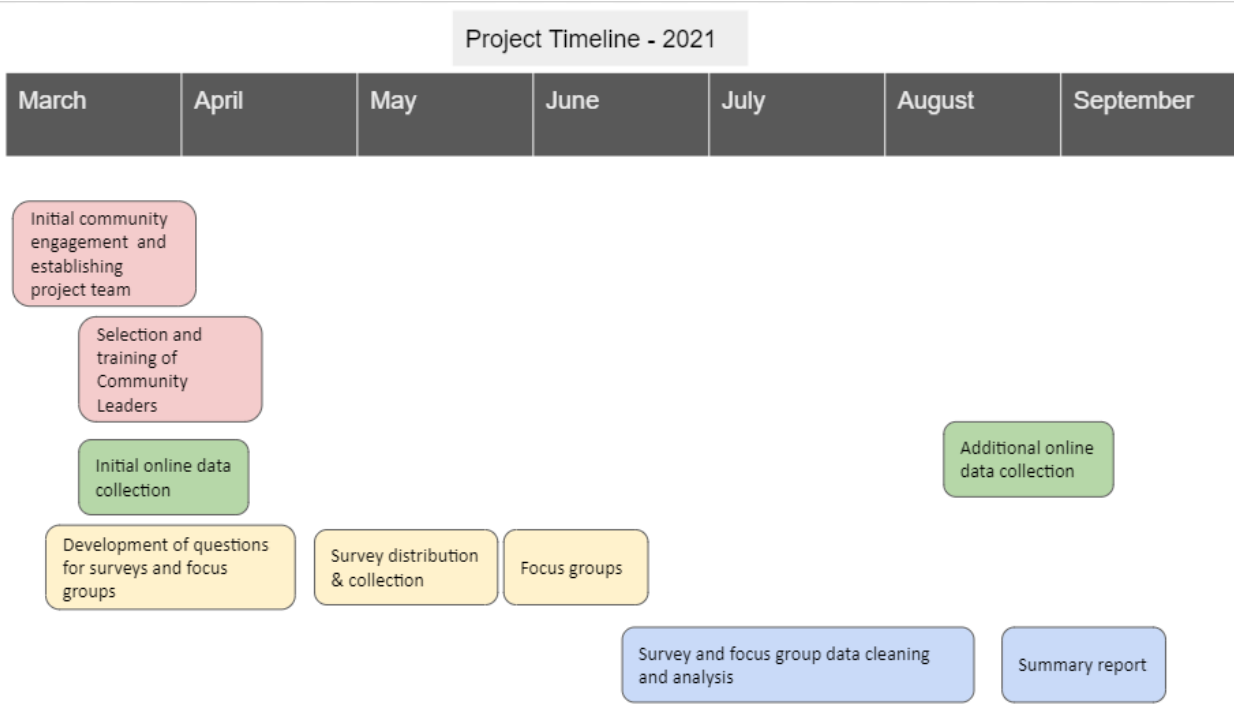
The specific demographics of the survey respondents can be found under the [findings](#) section.

Methodology and Analysis

Overview

This section provides information on the methods used to conduct a transportation needs assessment in Richmond. The needs assessment included three stages of data collection: 1) review of publicly-available online information on transportation access in Richmond; 2) a survey administered to a sample of community residents; and 3) a series of focus groups with community members and community based organizations. Each stage of data collection informed decision making and processes for the subsequent stage(s).

Timeline



Alt Text: This figure shows the timeline of the project in 2021. In March, we had the initial community engagement and established the project team. In March and April, we had the selection and training of community leaders, initial online data collection and development of questions for surveys and focus groups. In April and May, we conducted the survey distribution and collection. In May and June, we hosted the focus groups. In June-August, we completed the survey and focus group data cleaning and analysis. In August, we completed additional online data collection and in August and September, we completed the summary report.

Online Research

Rationale for Online Research

Prior to collecting data through surveys or focus groups, the team engaged in online research to better understand the existing transit landscape in Richmond. Online research doubly served to inform survey development, where individual perspectives and nuanced insights based on personal experiences in the neighborhood could be valuable.

Approach for Online Research

With the support of a Research Coordinator from the Lawrence Hall of Science Research and Impact Team, the project team gathered demographic information about Richmond's residents from online

census data. The team also collected information on the accessibility, affordability, reliability of various transit options -- including clean mobility options -- in Richmond from vetted websites. Findings from online research were reviewed and synthesized collectively by the project team and then presented to a panel of representatives from community organizations and local non-profit program providers--including the Richmond Outdoors Coalition (ROC) members YES Nature to Neighborhoods (YES), Rich City Rides, and the Watershed Project. Throughout, we will refer to this panel as “Community Leaders.” Community Leaders provided their reactions to the online information, sharing insights into their lived experiences in Richmond and their expertise about their community's values and needs. Community Leaders identified possible topics to explore further on the survey in order to capture the diversity of experiences from community members in different neighborhoods.

A key outcome from online research was the confirmation that certain communities within Richmond are disproportionately burdened by multiple sources of pollution and that they have population characteristics that make them more sensitive to pollution. The project team determined that the needs assessment and subsequent proposal would focus on serving these specific communities (“Focus Communities”). Identified by seven census tracts, these communities are: Atchison Village & Central Richmond, Beldingwoods, Iron Triangle; Metro Richmore Village, Park Plaza, Cortez-Stege, Laurel Park, Pullman; Unincorporated North Richmond; Richmond Annex, Panhandle Annex & Southwest Annex; Parchester Village.

We received technical assistance from SUMC to pull the most relevant data from the CMO CTNA map for our project.

Resident Survey

Survey Development and Rationale

The Resident Survey was developed with input from Community Leaders. Community Leaders reviewed a template provided by the Clean Mobility Options (CMO) Project and altered questions based on their knowledge of the Focus Communities. Community Leaders also provided input on new survey questions developed based on information gathered in Stage 1, online research. The project team created two versions of the survey—one for youth (defined as individuals under 25 years old) and one for adults. The content of the Youth Survey was largely identical for that for adults, but the youth-facing version of the survey included language that acknowledged the possibility that youth may be receiving rides from adults. In order to capture input from Spanish-speakers, all survey questions were translated by a team that included a native speaker and a certified Spanish translator. Respondents could elect to take the survey in either language. (See [Appendix](#) for survey in English and Spanish)

Input from Community Leaders was valuable for understanding equity implications of survey design. For example, on the recommendation of the Community Leaders, the question “Do you have a driver’s license” was removed. We had several team conversations on the equity implications of including this question and ultimately decided to remove it. In California, undocumented applicants can receive an AB

60 driver license. Although it is illegal for state and local law enforcement to discriminate against individuals who present an AB 60 license, this law does not protect against discrimination from federal law enforcement or law enforcement from other states. In addition, Community Leaders shared knowledge that there are community members who do not have a driver's license but still drive out of necessity. Several Community Leaders felt uncomfortable administering surveys that ask this question and felt strongly that including this question may dissuade people from completing the survey. We also asked focus groups participants to keep in mind solutions that would be of interest to people without driver licenses.

Data Collection - Resident Survey

The perspectives of Community Leaders were essential to planning an approach to data collection, and many Community Leaders themselves played a direct role in survey administration. The project team trained interested Community Leaders to conduct outreach to potential survey respondents via text and phone calls as well as trained Community Leaders to administer the survey at in-person events hosted by local organizations. Additionally, Community Leaders posted flyers in English and Spanish with the QR code for the survey in highly-visible locations in their neighborhoods. (See [Appendix](#) for flyers) The survey was offered primarily online; however, in cases where community members were not able to -- or did not wish to -- take the survey online, community leaders administered the survey verbally, over the phone or in person. Community Leaders received a stipend of \$500 each for their participation in this project.

To incentivize participation in the survey, respondents were offered a \$10 gift card to Target. Significant consideration was given to this incentive. The project team collaborated to identify the most equitable ways of distributing gift cards to study participants. Challenges arose as the project team planned for distributing incentives -- particularly to participants who do not have bank accounts. Although providing cash incentives was initially recommended by Community Leaders, this proved infeasible. Most participants would take the survey online and would therefore need to receive their incentive digitally. Online cash-transfer apps require that users have bank accounts, which not all potential survey respondents have. The project team explored cash e-gift card options such as VISA prepaid cards; however, the team learned that most of these options carry large associated fees. Community Leaders suggested providing survey participants with digital gift cards to local businesses; however, project team's inquiries to local businesses revealed that many local businesses do not actually offer gift cards. Target gift cards were then proposed by Community Leaders: Target is accessible to community members and its corporate values are not in stark contrast with those of the non-profit organizations involved with this project. Participants who completed the survey online received their digital gift card via email or text. Those who completed the survey in person were physically handed a gift card at the time they completed the survey.

The team aimed to collect as many surveys as possible during a four-week data collection period. After the initial four weeks, Community Leaders conducted targeted outreach to members of specific demographic groups (especially youth) to ensure that the sample of survey participants was

representative of the population of residents of the Focus Communities. For detailed information on the demographics of survey participants and of the Focus Communities, please see the [Findings](#) section of this report. Throughout project planning, the project team participated in weekly discussions and professional learning sessions on the [characteristics of white supremacy culture and antidotes to white supremacy](#) (Appendix G) that the project team could implement together. One of the characteristics of white supremacy culture that the project team worked to combat in conducting this needs assessment is the idea of “quantity over quality.” The project team felt very strongly that it was more important to collect information from the right people (emphasize “quality”), rather than simply collect surveys from the largest possible number of people (“quantity”) irrespective of whether these participants represented the Focus Communities. Notably a significant portion of residents in the Focus Communities do not have access to a smart phone or internet at home. Administering the survey to these individuals took more time and effort, but was prioritized to ensure that the sample was representative. In total, 194 surveys were collected. For details, please see the [Findings](#) section of this report.

Data Analysis - Resident Survey

Prior to analysis, representatives from the project team removed false responses from the dataset. Once all responses had been submitted, the project team identified empty, incomplete, ineligible, duplicate responses and reviewed them for removal. A large number of responses seemed to be coming from hackers in China (most likely in an attempt to get the gift cards), so we worked closely with the technical assistance at SUMC to confirm that all responses were valid. In particular, the team checked for consistencies in IP addresses and desired survey response locations, to ensure that responses were coming from Richmond. Once the data was cleaned, the project team generated summary statistics (e.g. answer selection count, mean, standard deviation, max, min, as applicable) using an analysis feature of the online software through which the surveys were administered. The team generated summary statistics for all responses as well as for the segment of responses from key demographic groups: adult responses only, youth responses only, spanish-speaking respondents only, and respondents who have an annual household income less than \$55,000. All summary statistics were reviewed by the project team and by an external analyst from UC Berkeley’s Lawrence Hall of Science Research and Impact Team to interpret responses and identify patterns.

Strategies for reaching our target communities

Our partners in the Richmond Outdoors Coalition, including Rich City Rides, the Watershed Project, and YES all work directly with youth and families in the neighborhoods within the census tracts of our project area. These areas are not typically served well by existing transportation services or existing public feedback processes. Our partner organizations have decades of experience engaging with neighborhood councils and community members, providing leadership development and cultivating community empowerment. All have strong track records of engaging residents in all aspects of program development and delivery to ensure the voices of the community are at the forefront of program development and refinement.

Our assessment activities:

- Included online, in person and telephone options for surveys to make sure we reached those with limited or no internet access
- Surveys and focus groups were conducted in both English and Spanish
- We utilized multiple methods of outreach (online, phone, word of mouth, organized activities) using established networks within the community
- We offered direct financial compensation for completing surveys and participation in focus groups, as well as for the Community Leaders to help to inform the needs assessment, to encourage inclusion for those who might not have the time/ability to participate without financial incentive
- We drew upon the longstanding established relationships that each of the partner organizations have within Richmond
- Findings from the Community Transportation Needs Assessment will be shared with the public through a future gathering. This gathering will be open to the public, we will specifically invite all focus group and survey participants, as well as invite local decision makers such as staff from the City of Richmond and local public transportation providers.

Community Engagement Events

Community Engagement Events Planning and Rationale

After collecting data through the Resident Survey, representatives from Richmond Outdoors Coalition (ROC) / Clean Mobility Options (CMO) Project and UC Berkeley's Lawrence Hall of Science Research and Impact Team conducted three virtual focus groups and a series of individual interviews with community residents to gather additional perspectives. One aim of the focus groups was to obtain context for a few notable survey findings. In particular, on the survey, approximately 40% of survey respondents reported that it was **not** generally easy for their family to get to local recreational activities, and 52% of survey respondents reported that they do **not** consistently have reliable, affordable transportation for visiting state and national parks. Focus groups aimed to understand why this might be the case. Toward this end, the project team developed a Focus Group protocol that invited participants to speak about their lived experiences with transportation inequities, their community contexts, and perspectives on transportation needs and transportation preferences.

In addition to supplementing the information gathered through surveys, another primary objective of each focus group was to solicit community input on potential mobility solutions that could improve Richmond residents' ability to access local and distant outdoor recreation. Through a robust discussion of possible solutions, a tangential intention was that focus groups would increase awareness by educating residents about clean, shared mobility options in addition to soliciting their feedback on proposed ideas.

Data Collection - Focus Groups

Three focus groups and a series of individual interviews took place. (see [Appendix](#) for focus group slides) One focus group included ROC program providers, which additionally aimed to gain these leaders' perspectives on opportunities and gaps in transportation specifically for their programs. The other two focus groups included members from a variety of neighborhoods in Richmond. Focus groups were open to all community members, but recruiting efforts specifically targeted families that participate in programs with the ROC program providers, such as the youth and adult community leaders from YES, The Watershed Project, and Rich City Rides. As incentive to participate, focus group attendees were offered a \$25 gift card to Target, as advised by community partners. The participants in the focus groups were Community Leaders, representing the neighborhoods and target backgrounds for our project. Focus groups took place via Zoom due to the ongoing COVID-19 Pandemic. One of the two community focus groups was conducted in English, the other in Spanish. Individual interviews were conducted in English. Focus groups were offered in the evenings based on Community Leaders' guidance on when most community members would likely be available.

Prior to the focus groups, the project team identified four possible solutions grounded in survey findings and extensive online research on the outcomes of clean mobility solutions that other organizations have previously tried and had terminated in Richmond. These new proposed solutions were:

1. Purchasing a fleet of electric vans that community organizations could reserve and rent for a very low price in order to provide excursions to outdoor recreation
2. Purchasing a fleet of electric vans that could be operated as shuttles, running on a fixed schedule to outdoor locations
3. Purchasing a fleet of electric vans that could be operated as shuttles that would transport students from specific school sites to the BART (Bay Area Rapid Transit) station
4. Increasing availability of functional bicycles (though a variety of possible means, including bikeshare or educational classes about how to upkeep bicycles)

During focus groups, the facilitator described each of these potential solutions and invited participants to share their reactions--especially focusing on the potential individual or community-wide benefits that this potential solution could offer, what concerns participants had about this potential solution, and what factors would be necessary for the success of this solution. Afterward, participants were provided information on other clean mobility solutions (including carpooling/vanpooling, innovative transit solutions, carsharing, and assistance to individual families with purchasing electric vehicles) that had been provided by other organizations in Richmond in the past and that were ultimately terminated due to high costs, low usage, and lack of ongoing funding. Participants discussed their impressions of and experiences with these formerly implemented solutions and how these options compared to the four potential new solutions proposed by the project team.

Data Analysis - Focus Groups

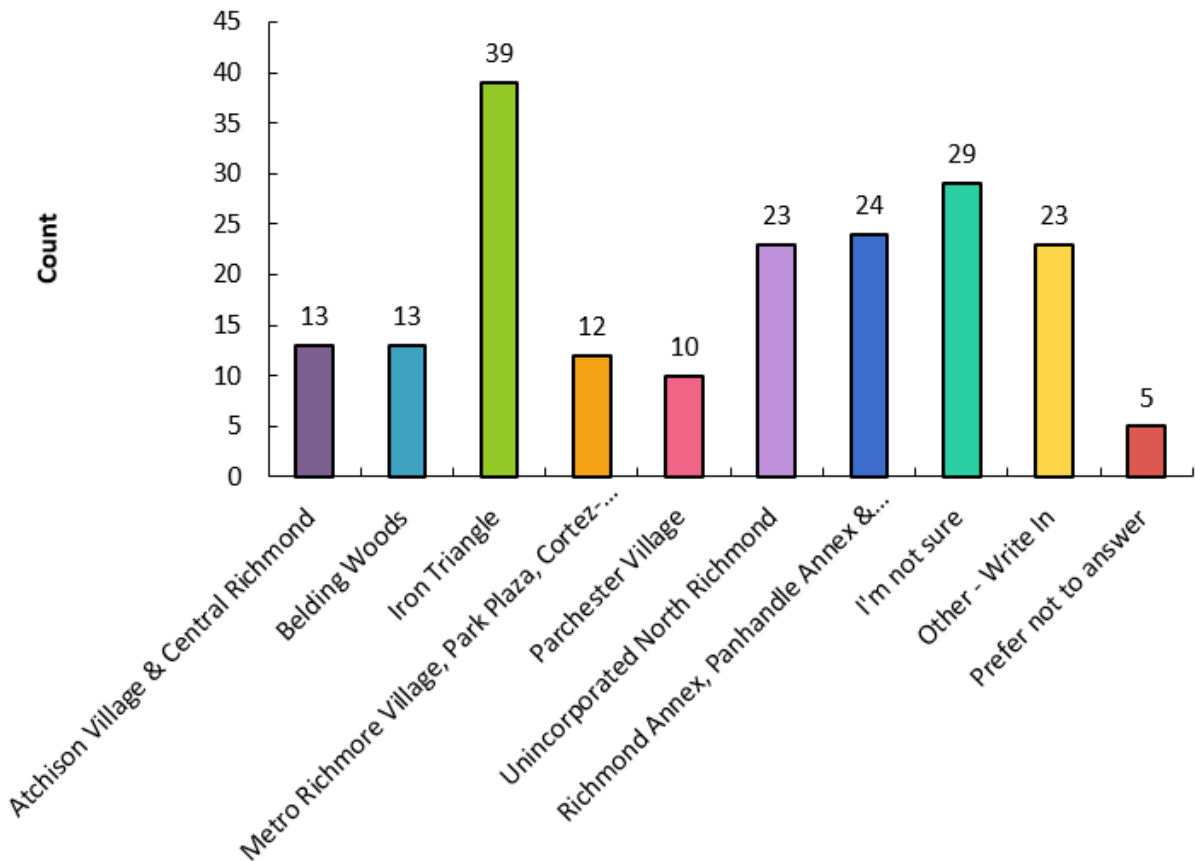
During each focus group, a member of the project team took detailed notes. Immediately following each focus group, facilitators met to debrief the discussion and the notes to confirm accuracy of the record. Notes across the focus groups were coded and synthesized into a summary by a Research Coordinator from UC Berkeley's Lawrence Hall of Science Research and Impact team. This summary was then reviewed and discussed by the entire project team.

Findings

Demographic Information

The project team gathered demographic information for the Focus Communities from publicly available census data. Findings reported in this section aggregate the seven census tracts to which the Focus Communities belong. Combined, these Focus Communities cover an area of 24,517,257 square meters within the city of Richmond and are home to 50,039 people total. Survey respondents live in the specific neighborhoods:

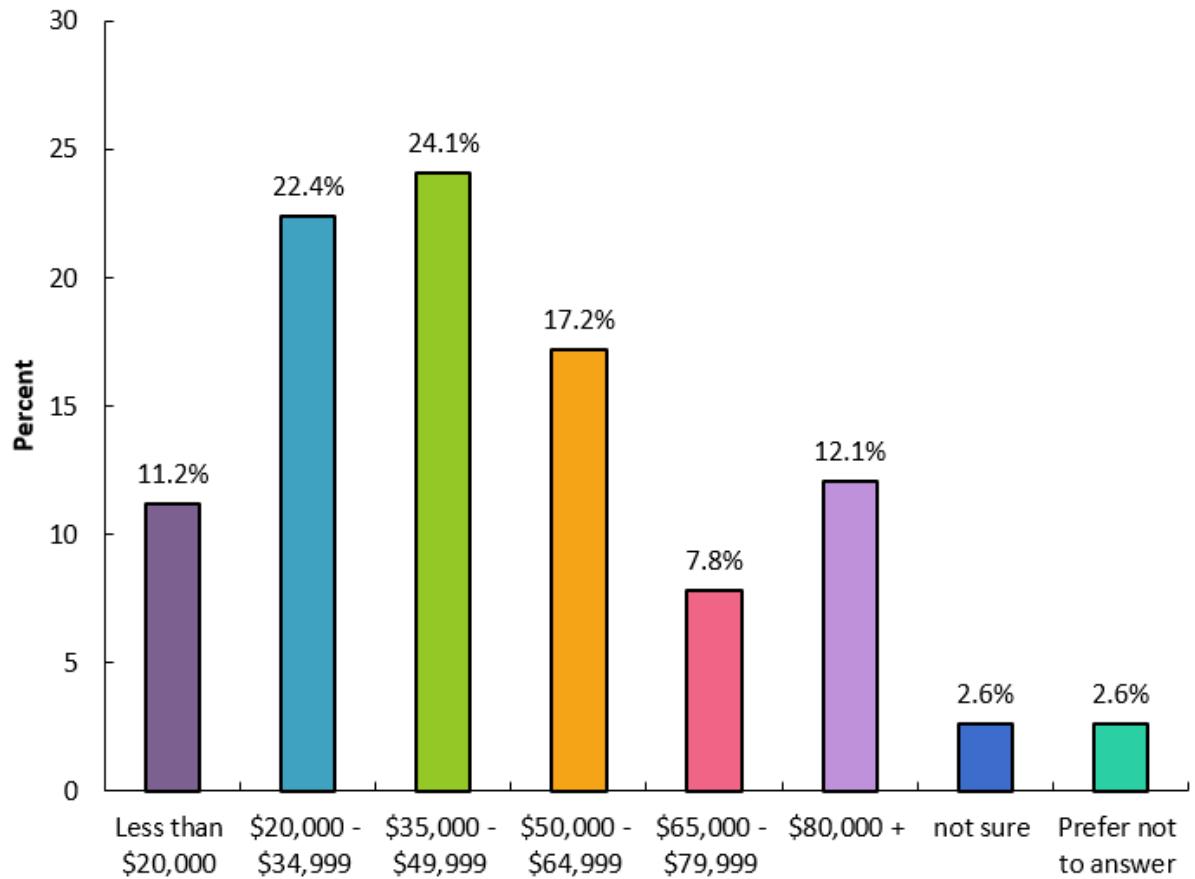
Neighborhoods of Survey Respondents



Alt text: *Neighborhoods of Survey Respondents; The chart shows the neighborhoods that our survey respondents live in: Atchison Village & Central Richmond, 13 respondents; Belding Woods, 13 respondents; Iron Triangle, 39 respondents; Metro Richmore Village, Park Plaza, Cortez-Stege, Laurel Park, Pullman, 12 respondents; Parchester Village, 10 respondents; Unincorporated North Richmond, 23 respondents; Richmond Annex, Panhandle Annex & Southwest Annex, 24 respondents; Unsure, 29 respondents; Other, 23 respondents; Prefer not to answer, 5 respondents.*

The Median Household Income in past 12 months (inflation-adjusted dollars to last year of 5-year range) of the Focus Communities is \$55,188.43, with 18.41% currently earning an income level that places them below the poverty level. (source: [CMO CTNA map- population and housing exported data](#) and [Demographic exported data](#)) 57% of survey respondents have an annual household income under \$50,000. The chart below illustrates the breakdown of household income of survey respondents:

Household Income of Survey Respondents



Alt text: This chart shows the household income of our survey respondents. 11.2% earn less than \$20,000/year; 22.4% earn between \$20,000-\$34,999/year; 24.1% earn between \$35,000-\$49,999/year; 17.2% earn between \$50,000-\$64,999/year; 7.8% earn between \$65,000-\$79,999/year; 12.1% earn \$80,000 and above a year; 2.6% are not sure; 2.5% prefer not to answer.

Notably, approximately 18.47% of households in the Focus Communities do not have access to a smartphone and 13.51% percent of households do not have Internet access. (source: [CMO CTNA map-Demographic info](#); [exported data](#)) This project did not collect data on Smartphone and Internet access, though testimony from the Community Leaders' experience administering the survey indicates that these percentages are likely reflected in the survey sample.

According to public data records, approximately 9.43% of households in the Focus Communities do not have a vehicle available (source: [CMO CTNA map-Demographic info](#); [exported data](#)) Among the sample of survey participants, 4.7% reported not having a vehicle available. This could indicate that our survey slightly under-sampled households without access to a car or that public records use different measures than would be captured by participant self-report, as in the survey.

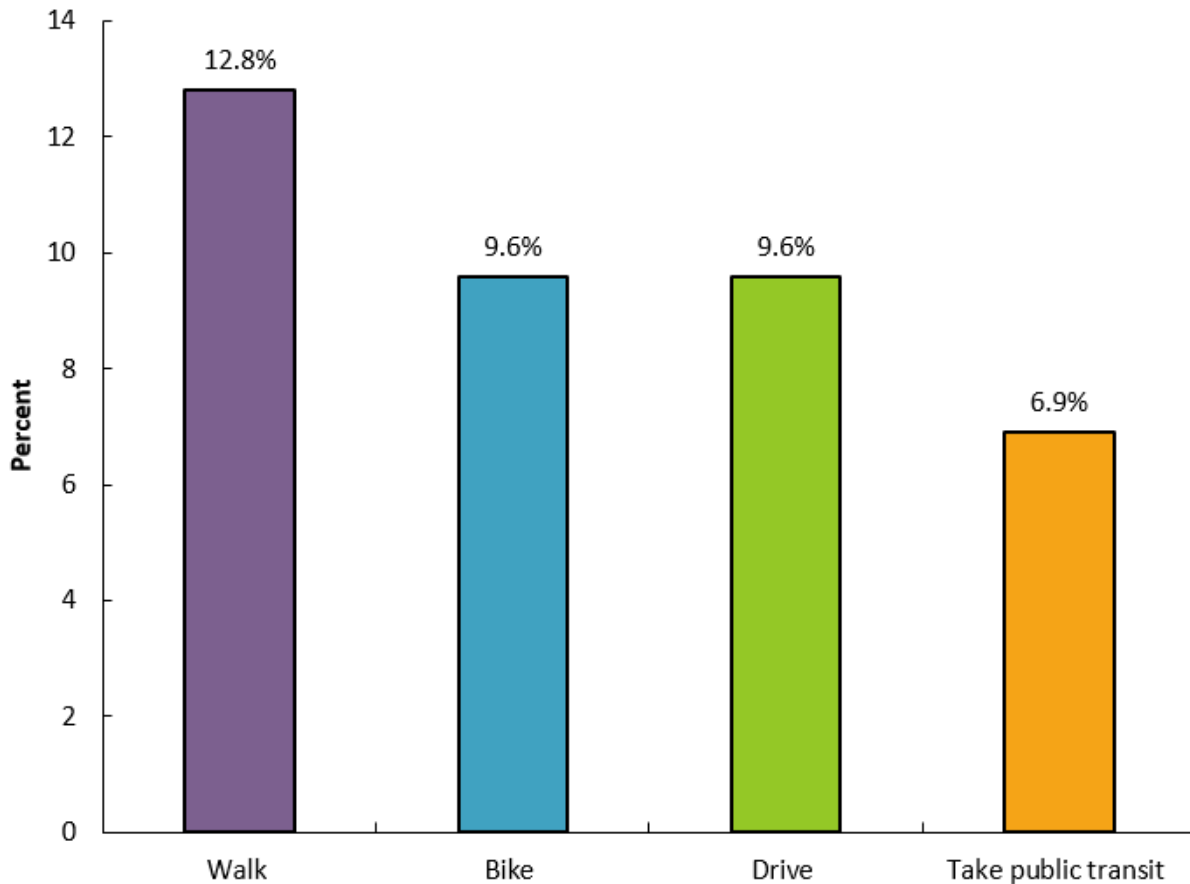
The table below outlines the race demographics for the Focus Communities and Survey Respondents. Survey sample was reasonably representative of the population as a whole.

Racial Identity Marker	Survey Respondents	Population of Focus Communities <i>Source: CMO CTNA map- Population and Housing Basics; exported data</i>
Black, African American or African	20.8%	22.64%
Indigenous or Native American	2.6%	0.4%
Latino, Latina, Latinx or Latine	66.7%	55.37%
Asian or Pacific Islander	1.6%	10.8%
Caucasian or White	8.3%	7.91%
Other - Write In	2.1%	2.86%
Prefer not to answer	2.1%	--

The survey collected additional information about respondents beyond that for which community-level public data exists. Survey participants were asked to report the language that they primarily speak at home. 55% primarily spoke English, 44% primarily spoke Spanish, and the remaining 1% indicated another language. Participants were also asked to self-identify if they are a “female head of household” -- as defined as, “you are the main financial contributor, the only person who files taxes in your home, the primary parent or child care provider.” 55% of survey respondents replied affirmatively.

The percent of the population of the Focus Communities with a disability is 12.93%. (*source: [CMO CTNA map-Demographic info](#); [exported data](#)*) Survey respondents were given the option to indicate if they have a condition that makes it difficult to walk, bike, drive, or take public transit. Their responses are illustrated below and are important to understanding the equity implications of proposed clean mobility solutions.

Survey respondents who have a condition that makes it more difficult to:



Alt text: This chart shows the percentage of our survey respondents who have a condition that makes it more difficult to walk, bike, drive, or take public transit. 12.8% of respondents have a condition that makes it more difficult to walk; 9.6% of respondents have a condition that makes it more difficult to bike; 9.6% of respondents have a condition that makes it more difficult to drive; 6.9% of respondents have a condition that makes it more difficult to take public transit.

While we analyzed our data looking at responses from different demographic groups: adults only, youth only, Spanish-speaking respondents only and respondents who have a household income less than \$55,000, we did not notice any significant differences in responses broken down by demographic group.

Obstacles to Accessing Outdoor Recreation

38% of adult and youth respondents strongly disagreed, disagreed or were neutral with the statement that it is generally easy for their family to get to recreational activities, defined through the examples of “after school programs, weekend outings, or trips to the park or the beach.” 38% of adult and youth respondents said they sometimes or never have safe, reliable, affordable transportation (personal

vehicle, biking, walking, public transportation) for them/their family to visit parks, nearby beaches and local recreation, such as Miller Knox/Keller Beach and Wildcat Canyon. 55.5% of adult and 54.3% of youth respondents said they sometimes or never have safe, reliable, affordable transportation (personal vehicle, biking, walking, public transportation) for them/their family family to visit state and national parks, such as Redwood Regional Park, Stinson Beach or Yosemite.

In subsequent questions, adults and youth expanded on their rationale for their answer selection. Those who disagreed or strongly disagreed that it is easy for their family to access outdoor recreation commonly mentioned concerns about safety and distance. Youth who indicated that they are dependent on rides from family members additionally mentioned logistical constraints of getting rides and their parents' availability.

Most survey respondents reported that they had access to a reliable car. In fact, 63.3 percent of respondents reported having access to 2 or more reliable cars. Only 4.7 percent of all respondents did not have access to a reliable car. Findings did not differ significantly when examined by income level. Despite having access to cars, many participants cannot afford to use these cars for recreational activities. (Participants were asked to consider the costs of gas and maintenance to go to and from activities such as after school programs, weekend outings, trips to the park or the beach.) Only 60.0 percent of all participants with access to one or more cars reported that they could afford to use their car(s) for recreational activities. Among participants with annual household incomes of less than \$55,000, only 52.3 percent of respondents with access to one or more cars reported that they could afford to use their car(s) for recreational purposes.

When asked to indicate preferences for and habits regarding everyday transportation (such as commuting to work/school or running errands), survey participants favored driving, bicycling, and walking; however, participants raised concerns about the practicality of bicycling or walking to specific outdoor recreation sites. Participants in both the survey and in focus groups noted that walking or biking were less practical for traveling to further away locations. They also expressed concerns with safety (especially for youth) when riding bicycles or walking due to vehicle traffic, neighborhood violence or crime, and lack of good lighting on roads.

Survey respondents provided details of their perceptions that using bicycles to access recreation was likewise a challenge. 78 percent of survey participants reported that they have access to reliable bicycles. However, among these respondents, only about half of adults (54.2 percent) and youth (44.6 percent) reported that they could use these bicycles to get to recreational activities. Those who indicated that they could not use bicycles to commute to recreational activities cited safety and distance as being the primary barriers to using bicycles for this purpose. Youth participants particularly emphasized distance as a chief concern for using bicycles.

Focus groups participants discussed in detail their perceptions of residents' ability to walk to recreational activities, such as parks. Although the EPA National Walkability Index characterizes Focus Communities as having above average walkability (with scores ranging from 10.51 to 20 across all neighborhoods, out of a maximum total walkability score of 20), this walkability did not reflect participants' lived

experiences. Even in cases where the desired destination is within walking distance, participants -- especially youth participants -- in focus groups did not feel safe walking, primarily due to a need to cross busy streets. Some focus group participants also expressed concerns about the physical condition of sidewalks, mentioning that some are in need of maintenance. The table below includes key comments on walkability to parks for each of the Focus Communities in this study. Within each of these targeted neighborhoods, there are pockets of inaccessibility, demonstrating a need.

Neighborhood	Comments on Walkability to Parks
Unincorporated North Richmond	High and moderate gaps in park access along parkway south of Chelsey
Atchison Village & Central Richmond	No gaps in park access Atchison, Veterans Memorial, and Nevin Park in this tract
Richmond Annex, Panhandle Annex & Southwest Annex	Moderate gaps in park access in triangle corner from BART tracks to 33rd and Carlson
Iron Triangle	Moderate gaps in access along Richmond Parkway from 2nd to Lucas Ave.
Beldingwoods	High and medium gaps in park access along tracks to 23rd/ Nevin to Pennsylvania
Metro Richmore Village, Park Plaza, Cortez-Stege, Laurel Park, Pullman	moderate gaps in park access in corner of Pulmand and Carlson; blocked by BART tracks

Source: *The Trust for Public Land Climate-Smart Cities Richmond*: https://web.tplqis.org/richmond_csc/

Data from the UCLA Center for Neighborhood Knowledge and California Air Resources Board indicate that Focus Communities in this study generally have below-average availability of parks and public open space per capita, compared to all other census tracts in the state of California. Four of the Focus Communities ranked below the 50th percentile (below average) access to parks and public open spaces when compared to all other census tracts in the state—with one Focus Community ranking below even the 20th percentile mark. Only three of the Focus Communities were categorized in the 60th percentile or higher. This ranking is surprisingly low when taken in context of the Bay Area. The Bay Area in general ranks much higher than most regions in California in terms of access to parks and public open space; consequently, compared to other neighborhoods within a 50-mile radius, the Focus Communities noticeably stand out for their lack of access to parks and public open spaces.

The Focus Communities also received low ratings for access to high-quality transit locations from UCLA Center for Neighborhood Knowledge and California Air Resources Board. On average, the Focus Communities received a Transit Access score of 2.57 out of 10. For comparison, San Francisco received a

score of 9.(Source: *Transportation disparities mapping tool from UCLA Center for Neighborhood Knowledge and California Air Resources Board*: https://experience.arcgis.com/experience/9c13f35df3904dcb80530d0df49bdf9e/page/page_4/ exported data [here](#))

Perception of Public Transit

In general, survey results revealed enthusiasm for public transit. Survey participants were asked to indicate their preferences for transportation options when presented with a variety of scenarios -- assuming that transit options were readily available and affordable in each case. A plurality of respondents (33.5%) indicated that they would prefer to use public transportation to commute to work or school or for activities such as accessing groceries or running errands. The transit option that received the second highest number of votes for these activity categories was bicycling. A majority of respondents indicated that using public transportation would be among their top three transit choices for accessing after school activities and for accessing parks and outside activities, especially on weekends or holidays. Most respondents listed walking and bicycling in their top three choices along with public transit.

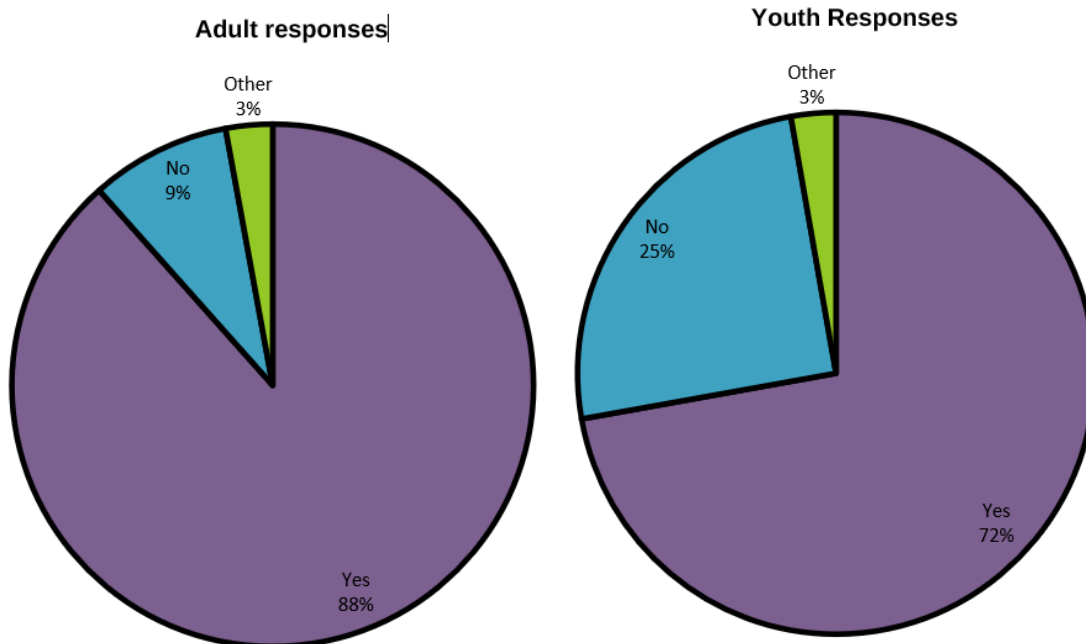
More than half (55.9%) of adult and youth (52%) respondents reported actually using public transportation (including BART and bus) regularly to access recreational activities besides school or work. Among those who regularly use public transportation, a slight majority (57% of adults and of youth) are satisfied with their experiences with public transit. Those who are dissatisfied expressed concerns with the lack of safety, time necessary to travel, and cost of public transit. Several respondents additionally indicated their dissatisfaction stems from the fact that transit does not arrive frequently enough or is not in range of their desired destination. Notably, the vast majority of youth respondents who regularly take public transit to recreational activities but who expressed dissatisfaction with it cited safety as their primary concern.

In focus groups, participants voiced appreciation for the affordability and ease of public transit for everyday transportation needs and expressed appreciation for the idea of using public transit to access outdoor recreation in theory; however, in practice, participants raised concerns about using public transit to access outdoor recreation. In particular, participants noted that public transit options (such as busses or light rail) do not often drop-off directly at recreational sites. This makes traveling to outdoor recreation on public transit a time-consuming process because participants need to account for time to walk to their ultimate destination. Participants also voiced concerns about the crowdedness of public transit and the fact that existing busses do not often run on time and that they make frequent stops. For these reasons, focus group participants did not usually use public transit to get to outdoor recreation and did not see mobility solutions relying on public transit as being viable.

Support for Community-Organized Events to Access the Outdoors

The survey and focus groups revealed strong support among community members for community-organized events to outdoor recreation activities and locations of interest. Survey

participants were asked, “if local organizations offered free transportation to participate in their programming locally at locations like a state park and beach, would your family participate more frequently?” A staggering 88.5% of adult respondents and 72.2% of youth participants replied affirmatively. This support is illustrated below:



Alt text: This pie chart on the left shows that 88% of adult respondents said "yes" to the question “if local organizations offered free transportation to participate in their programming locally at locations like a state park and beach, would your family participate more frequently?” 9% of respondents said no and 3% said other.

Alt text: This pie chart on the right shows that 72% of youth respondents said "yes" to the question “if local organizations offered free transportation to participate in their programming locally at locations like a state park and beach, would your family participate more frequently?” 25% of respondents said no and 3% said other.

The potential solutions presented during focus groups that involved purchasing a fleet of vans were met with general enthusiasm. Participants wanted to ensure that these opportunities would be offered to community members at little to no cost and that they would be advertised effectively, such that community members would be made aware of the opportunity to participate. Focus group participants felt that there were many possible locations to park a fleet of vans; however, they wanted to ensure that community members who saw the parked vans would understand that these vans were for community use.

In response to Option 1 (purchasing a fleet of electric vans that community organizations could reserve and rent for a very low price in order to provide excursions to outdoor recreation) Community Organization Leaders voiced that having access to a fleet of vans that would cost little to rent could support existing programming and enable them to support community members in reaching new

destinations. Community Organization Leaders also noted the importance of having bike racks on any purchased vans. Community Organization Leaders discussed a range of services that they could offer with these vans, such as transporting formerly incarcerated people to job sites and doctors appointments, taking youth to sports games and practices, morning and after school care, field trips for schools and youth and family outings to parks in Richmond and within a few hours' drive.

Option 2 (purchasing a fleet of electric vans that could be operated as shuttles, running on a fixed schedule to outdoor locations) was likewise very popular with community members and Community Organization Leaders. Focus group participants liked the predictability of shuttles--especially the ideas that the shuttles could go directly to their location of interest, could make few stops, and could arrive at a known time. Focus group participants cited positive experiences with similar concepts in other cities. Community members would want to ensure that shuttles remained affordable and that they could reserve a space -- expressing concerns about how many people could be seated within the vans. They also raised concerns about the logistics of operating these shuttles: who would be running them? Who would have the authority to determine the schedule and sites visited? How would funding continue?

Limitations of Study

Our survey could only be administered in English and Spanish, so perspectives from speakers of other languages were not captured. Participants (and their responses) might have been influenced by recent experiences with the pandemic. Respondents might not have used public transit as much during the pandemic, and therefore might be biased toward other forms of transportation / more reliant on cars than normal.

Discussion and Solutions

Factors Contributing to Successful Transportation Options

Findings from online research, survey, and focus groups illustrate the importance of solutions being low or no-cost to users, safe, and time-efficient. Participants also expressed the need for any solutions to be accessible: available to all community members, usable to individuals with limited mobility, and well-advertised.

Actions to Enhance Clean Mobility with Community Support

The project team recommends a solution that combines options 1 and 2 presented in the focus group. The partners intend to apply for the Clean Mobility Options Voucher program to use that funding to purchase a fleet of electric vans that would be available for community organizations to reserve and rent

at a very low cost. Community organizations could determine for themselves how to best make use of these vans. Organizations could rent the vans to provide convenient, safe, and affordable transportation for formal excursions; organizations could alternatively elect to operate a shuttle if this is of interest to their community members. Organizations could determine based on the needs and interests of their community members where the shuttle would pick up and drop off, when these stops would take place, and how individuals could reserve a seat on the shuttle.

Next Steps

- Work with community partners to finalize the logistical components of the proposed solutions - drivers, permitting, parking (24/7 access, secure, free, able to install charging location), how the organizations could make use of the vans-- draft proposal: two 15 passenger vans with full time drivers funded for 3-4 years (if allowed for voucher) and two 10 passenger vans that don't require special driver licenses (but will depend on the comfort level of staff and will include some level of driver training) - with bike racks or a cargo van for bikes; current range of vehicles for 15 passenger electric vehicles: 200+ miles (will get you to Yosemite, but not home- can't charge there yet); consider hydrogen-fuel vans (cleaner because don't need mined or rare metals for batteries)
- Apply for Clean Mobility Options Voucher program funding to implement solutions
- Share out findings from the transportation needs assessment with the community- via our websites, social media, email lists and an in-person or virtual meeting. Findings from the Community Transportation Needs Assessment will be shared with the public through a future gathering. This gathering will be open to the public, we will specifically invite all focus group and survey participants, as well as invite local decision makers such as staff from the City of Richmond and local public transportation providers.

Appendix

[Appendix A: Survey in English](#)

[Appendix B: Survey in Spanish](#)

[Appendix C: Community focus group slides: English](#)

[Appendix D: Community focus groups slides: Spanish](#)

[Appendix E: Program provider focus group slides](#)

[Appendix F: Flyer- English & Spanish](#)

[Appendix G: Characteristics of white supremacy culture and antidotes to white supremacy](#)