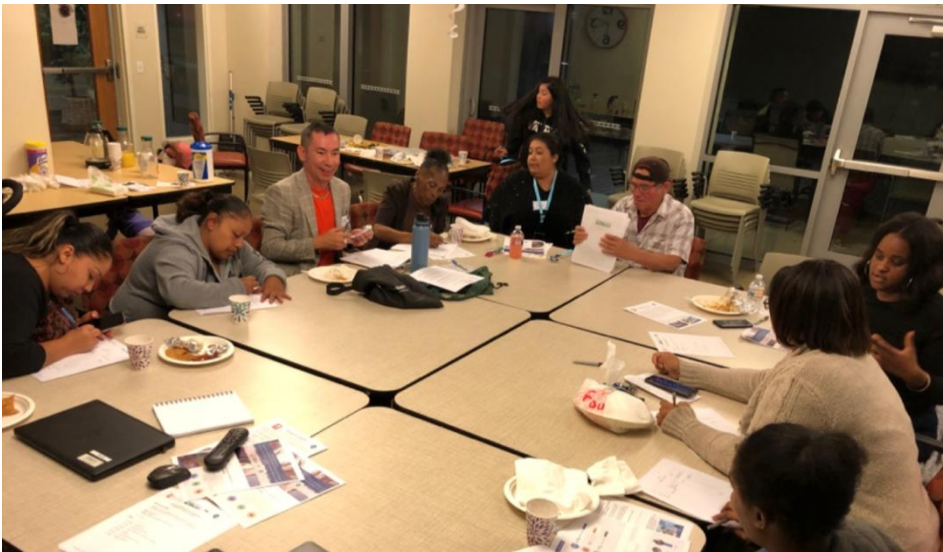




Car Sharing and Mobility Hubs in Affordable Housing Pilot Project

Community Transportation Needs Assessment *Process, Results, and Lessons Learned*

Prepared by TransForm
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Table of Contents

Acknowledgments	4
Executive Summary	5
Introduction	9
Project Background	9
Project Team	9
On-Site Partners, Project Advisory Committee, and Site Level Teams	10
About the Sites	10
Community Transportation Needs Assessment	14
Purpose of this Report	15
Methods	16
Timeline	16
Designating Site Coordinators	16
Site Level Team (SLT) Recruitment	17
Survey Development	18
Survey Distribution and Collection	19
Focus Groups	22
Data Entry	23
Data Cleaning	23
Data Analysis	24
Results	25
Demographics	25
Current Transportation Behavior and Preferred Transportation Benefits	29
Familiarity with New Shared Mobility Options and Interest in Car Share	35
Banking, Debit/Credit Card Access and Phone Technology	36
Discussion and Lessons Learned	38
Key Findings from Needs Assessment Results	38
Personnel and Non-Personnel Costs	39
Lessons Learned from Needs Assessment Process	41

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On-site partners:

- East Bay Asian Local Development Corporation (EBALDC)
- First Community Housing (FCH)
- Richmond Community Foundation (RCF)
- The City of Richmond

Project Advisory Committee members:

- AC Transit
- Bay Area Air Quality Management District (BAAQMD)
- Bay Area Rapid Transit (BART)
- The Greenlining Institute
- GRID Alternatives
- The City of Oakland
- The City of San Jose
- The Santa Clara Valley Transportation Authority (VTA)

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- Ladon Technologies

We especially would like to thank the residents who took the time to shape and participate in the needs assessment process, including serving on a Site Level Team (SLT), conducting outreach, performing data entry, completing the survey, and participating in a focus group or individual interview. Residents will continue to provide ongoing input on the project.

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Cover photo credits (clockwise from top left): First Community Housing, Michael Halberstadt, 123RF, and David Beezer.

Executive Summary

The Metropolitan Transportation Commission (MTC), the Bay Area's transportation planning, financing and coordinating agency, in partnership with TransForm, a nonprofit addressing climate change and social inequity through transportation and housing solutions, received a \$2.25 million grant from CARB to design and implement the Car Sharing and Mobility Hubs in Affordable Housing pilot project, which includes three mobility hubs in disadvantaged communities in Oakland, Richmond, and San Jose. The mobility hubs provide access to new, clean mobility options including an electric vehicle car sharing program and a mix of additional mobility options based on residents' needs, such as transit passes, bike sharing, and e-scooter sharing. The project increases access to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily needs, while also working to reduce vehicle trips and greenhouse gases to meet the state's broader climate goals. Car Sharing and Mobility Hubs in Affordable Housing is funded by 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 disadvantaged communities.

Project Sites:

- **Lion Creek Crossings**, a 567-unit multifamily affordable housing development located in the Havenscourt/Coliseum neighborhood of East Oakland, owned by the East Bay Asian Local Development Corporation (EBALDC).
- **The Nystrom Neighborhood**, defined by the City of Richmond's Nystrom United Revitalization Effort (NURVE) as bounded by Ohio Avenue, S 20th St, Cutting Blvd, and S 2nd St. The neighborhood includes 1,158 housing units.
- **Betty Ann Gardens**, a 76-unit multifamily affordable housing development located in the Berryessa neighborhood of San Jose, owned by First Community Housing (FCH).

Project Goals and Objectives:

- Increasing access for low-income residents and disadvantaged communities to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily needs.
- Providing tailored clean mobility options to address resident needs identified through a community transportation needs assessment and meet equity goals.
- Reducing greenhouse gases and criteria pollutants from the combination of reduced vehicle trips and use of electric vehicles rather than internal combustion engine vehicles.
- Reducing private vehicle ownership and vehicle miles traveled (VMT).
- Reducing transportation costs for residents.
- Informing cities and developers of best practices for right-sized parking and mobility options for affordable housing developments.
- Creating a sustainable and viable mobility program for affordable homes that is modeled after the most innovative transportation demand management (TDM) programs currently in

operation. These programs are more commonly integrated into market-rate housing developments than in affordable housing.

Project Team

The project team consists of MTC, TransForm, and the Shared-Use Mobility Center (SUMC), a public-interest organization focused on equitable shared mobility. MTC provides project administration and budgetary oversight whereas TransForm leads project design and implementation. SUMC helped develop the needs assessment survey, conducted the analysis of the survey results, and will assist with the vendor selection process for car sharing and additional mobility services.

Community Transportation Needs Assessment

Prior to implementing car sharing and mobility hubs services, the project team led a community transportation needs assessment process (“needs assessment”) to understand residents’ current travel behavior and identify their transportation needs and challenges. This in part was the result of lessons learned from CARB’s Senate Bill 350 Low-Income Barriers Report¹ which highlighted this as a critical first step in identifying barriers, opportunities, and solutions best suited to meet the unique needs of residents in each community. The needs assessment also explored residents’ interest in each potential mobility option (e.g. bike sharing, transit passes) to determine which to prioritize for each site.

The needs assessment was designed to:

- Understand residents’ current transportation habits and needs.
- Understand challenges faced by residents in accessing and utilizing various mobility options for themselves and their family.
- Gauge residents’ current knowledge and interest in learning about and using new shared mobility options located at an on-site mobility hub.
- Understand the demographic profile of the residents.
- Collect baseline data to measure progress on project goals, e.g. access to destinations, mode shift, and car ownership.

Conducting a needs assessment is a valuable first step, and empowers residents to shape the clean transportation investments happening in their communities. This is a key lesson for pilot project design, and an approach that can be modeled in other communities that want to increase access to clean transportation and mobility options.

¹ California Air Resources Board. “Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents.” 2018.
https://ww2.arb.ca.gov/sites/default/files/2018-08/sb350_final_guidance_document_022118.pdf

Purpose of this Report

This report was prepared to detail the steps taken by the project team to complete the needs assessment, summarize key findings, and share lessons learned. We intend for this report to serve as a helpful resource for other organizations considering conducting a transportation needs assessment in their own communities.

Key Findings and Lessons Learned

Following a successful outreach effort led by on-site staff and resident surveyors, a total of 583 paper surveys were completed by residents and 36 residents participated in focus groups or individual interviews across the three sites. **The results include the following key findings and potential actions (support for these findings are detailed in the “Results” section):**

Current Transportation Behavior and Preferred Transportation Benefits

- The majority of residents ride public transit regularly, and for many it is their main mode of transportation.
- Residents may not be aware of discounted transit programs that they qualify for (e.g. youth and senior transit discounts). The project team will promote these programs to residents through the outreach and education program.
- Personal safety is a major concern among residents. For many, a personal vehicle is the safest option to get around, as they do not feel safe walking, biking, or taking transit.
- When asked which transportation benefits they are most interested in receiving, Clipper cash, AC Transit EasyPasses, and Lyft/Uber rides were most popular, while bike share and e-scooter share were less popular.

Familiarity with New Shared Mobility Options and Interest in Car Share

- Overall, residents are interested in car sharing, but need more information in order to better understand the benefits this kind of program can provide.
- Many residents do not have a driver's license (25 to 50% of residents age 16 or older) and will not be able to use the car sharing program as a driver.
- In Oakland and San Jose, the majority of households own zero or one car(s). Households with low car ownership are expected to benefit the most from the car sharing program.
- Cost is a concern among residents, both for the new services (car sharing, bike sharing, etc.) and for affording transit fares.
- Residents expressed interest in having access to clean transportation options and reducing their environmental impact.

Banking, Debit/Credit Card Access and Phone Technology

- The majority of residents do not regularly use a bank account, credit card, debit card, or prepaid debit card. Since many mobility services require at least one of these options, the project team will pursue cash payment options and other strategies to serve unbanked residents based on their specific needs.

Additionally, the project team documented the following lessons learned (details are provided in the “Lessons Learned from Needs Assessment Process” section):

- Conducting a needs assessment is an important first step for ensuring that planned transportation investments reflect the needs and interests of the community they are intended to serve.
- It is necessary to build trust with partner organizations and residents prior to beginning the needs assessment process.
- The budget for a needs assessment process should include sufficient funding for translation, printing, food, incentives, and staff time.
- Collaborative survey development with communities is an iterative process and considerable time and resources should be dedicated to this phase.
- Presenting a draft version of the survey to residents helps ensure that the final materials are meaningful, engaging, and easy to use.
- Paper surveys require significantly more time and staff resources than electronic surveys (especially for in-person outreach, data entry, and data cleaning), but were found to be the most suitable and accessible format for our audiences.
- In-person survey outreach allowed Community Surveyors and Site Coordinators to answer questions and address any concerns the residents shared about the survey or the mobility hubs project.
- Site Coordinators, on-site staff members who are knowledgeable of and familiar to each community, were vital to the success of the needs assessment process.
- Hiring and training residents for survey outreach and data entry creates opportunities for meaningful community engagement, including workforce development.
- Simultaneous language interpretation with headsets is the preferred method for non-English speaking residents to participate during meetings.

After concluding the needs assessment process, the project team used the results to design a tailored implementation plan for the mobility hub at each site. The needs assessment data provides a useful tool for informing future implementation and outreach activities, and the project team will utilize the processes that are now in place to engage residents and hear their insights.

Introduction

Project Background

The Metropolitan Transportation Commission (MTC), the Bay Area's transportation planning, financing and coordinating agency, in partnership with TransForm, a nonprofit addressing climate change and social inequity through transportation and housing solutions, received a \$2.25 million grant from CARB to design and implement the Car Sharing and Mobility Hubs in Affordable Housing pilot project, which includes three mobility hubs in disadvantaged communities in Oakland, Richmond, and San Jose. The mobility hubs provide access to new, clean mobility options including an electric vehicle car sharing program and a mix of additional mobility options based on residents' needs, such as transit passes, bike sharing, and e-scooter sharing. The project increases access to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily needs, while also working to reduce vehicle trips and greenhouse gases to meet the state's broader climate goals. Car Sharing and Mobility Hubs in Affordable Housing is funded by 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 disadvantaged communities.

Project goals and objectives include:

- Increasing access for low-income residents and disadvantaged communities to economic opportunity, medical facilities, schools, parks, grocery stores, and other daily needs.
- Providing tailored clean mobility options to address resident needs identified through a community transportation needs assessment and meet equity goals.
- Reducing greenhouse gases and criteria pollutants from the combination of reduced vehicle trips and use of electric vehicles rather than internal combustion engine vehicles.
- Reducing private vehicle ownership and vehicle miles traveled (VMT).
- Reducing transportation costs for residents.
- Informing cities and developers of best practices for right-sized parking and mobility options for affordable housing developments.
- Creating a sustainable and viable mobility program for affordable homes that is modeled after the most innovative transportation demand management (TDM) programs currently in operation. These programs are more commonly integrated into market-rate housing developments than in affordable housing.

Project Team

The project team consists of MTC, TransForm, and the Shared-Use Mobility Center (SUMC), a public-interest organization focused on equitable shared mobility. MTC provides project administration and budgetary oversight whereas TransForm leads project design and implementation. SUMC helped develop the needs assessment survey, conducted the analysis of the survey results, and will assist with the vendor selection process for car sharing and additional mobility services.

On-Site Partners, Project Advisory Committee, and Site Level Teams

On-site partners include East Bay Asian Local Development Corporation (EBALDC) and Related Companies in Oakland, First Community Housing (FCH) in San Jose, Richmond Community Foundation (RCF), and the City of Richmond.

In addition to the project team, there are multiple groups that have been formed to support the long-term development and implementation of the project, including the Project Advisory Committee (PAC) and the Site Level Teams (SLTs):

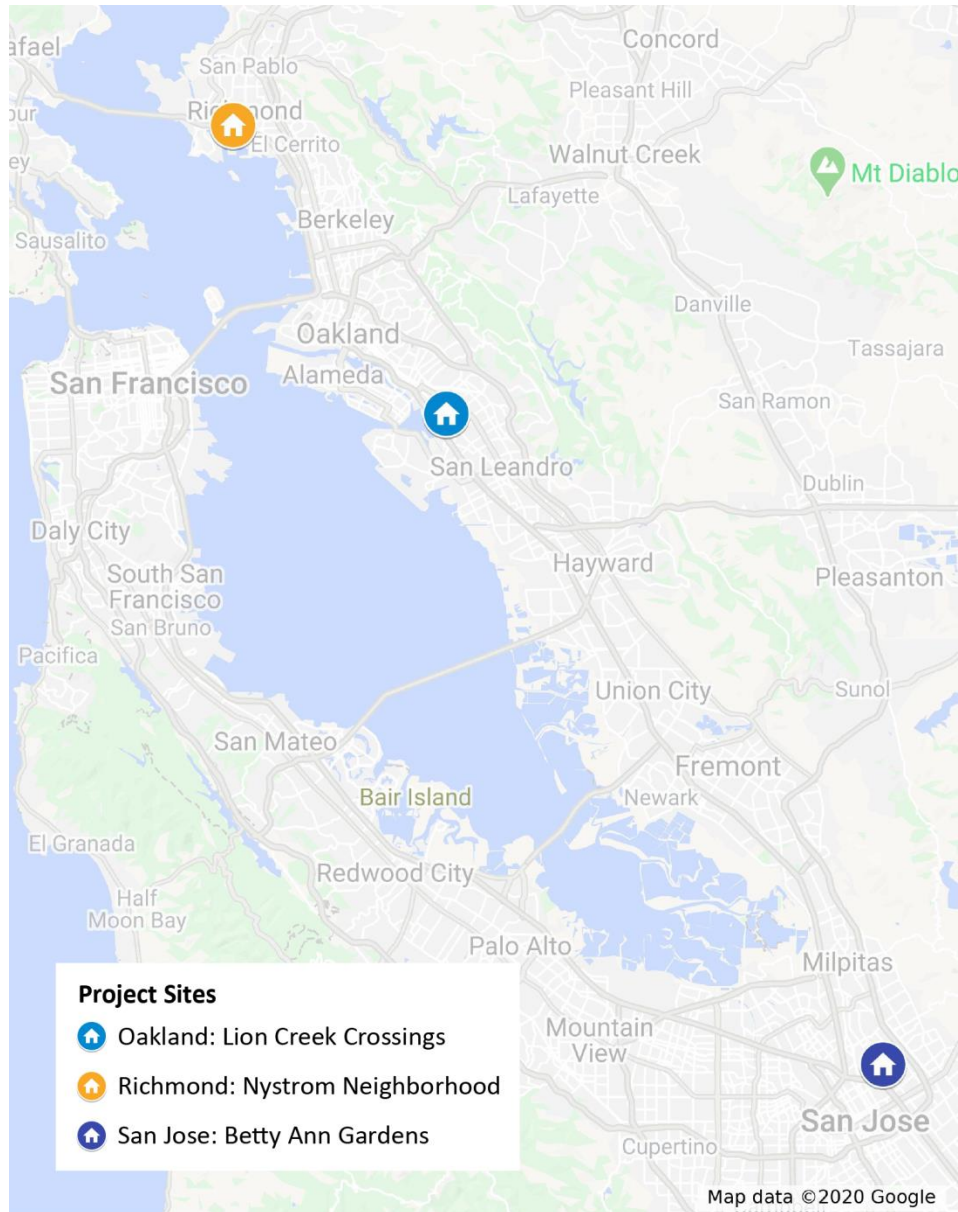
- The Project Advisory Committee (PAC) provides high-level guidance on project design and implementation, complementary efforts, and financial sustainability of the project beyond the pilot phase. The committee includes representatives from AC Transit, the Bay Area Air Quality Management District (BAAQMD), Bay Area Rapid Transit (BART), the Greenlining Institute, GRID Alternatives, the City of Oakland, the City of San Jose, the Santa Clara Valley Transportation Authority (VTA), and members of the project team.
- The three Site Level Teams (SLTs) consist of approximately ten residents at each project site. The SLT members serve an important role in sharing their knowledge, advice, and vision to help design a project that will work best for all residents. SLT members also conduct outreach and serve as ambassadors of the project to their neighbors. SLT members are compensated for their time and expertise.

About the Sites

The three participating sites are distinct communities varying by population size, resident demographics, access to transit, and more. In many ways, each site is a “pilot within a pilot.” Whenever possible, the project team makes decisions at the site level to ensure the project is customized to meet the unique needs of each site.

The project team selected the sites by first identifying the areas in the Bay Area with a CalEnviroScreen 2.0 value of 75 or above, per the grant solicitation requirements. The project team then reached out to TransForm’s partner organizations that both operate affordable housing developments in these areas and have previously expressed interest in innovative transportation solutions. In the end, three sites agreed to be included in the grant proposal. The team successfully included sites that represent a variety of place types, from urban to suburban.

Figure 1 - Project site map



The Oakland site, Lion Creek Crossings, is a multifamily property owned by the nonprofit organization EBALDC, Related Companies, and the Oakland Housing Authority. The property includes 567 affordable homes for families and seniors in the Havenscourt/Coliseum neighborhood of East Oakland. On-site services include two early childhood education programs, a computer center, an after-school program, and a Family Resource Center tied to the local public schools that is operated by EBALDC and provides support with benefits enrollment, housing stabilization, basic employment skills, and financial services. The site is served by multiple AC Transit bus lines, and is about two blocks from the Coliseum BART station.

Figure 2 - Lion Creek Crossings (image credit: EBALDC)



The Richmond site is defined as the Nystrom neighborhood, bounded by Ohio Avenue, S 20th Street, Cutting Boulevard, and S 2nd Street (see Figure 3). The neighborhood includes 1,158 units. The boundaries are defined by the Nystrom United Revitalization Effort (NURVE), a comprehensive revitalization effort led by the Richmond Community Foundation, the City of Richmond, and additional City, County, and community entities. The neighborhood is centered around Nystrom Village (a public housing development owned by the Richmond Housing Authority), Nystrom Elementary School, Richmond College Prep, and Martin Luther King Jr. Park. The neighborhood is served by multiple AC Transit bus lines, and is about a 15-minute walk from the Richmond BART station.

Figure 3 - NURVE boundaries (image credit: City of Richmond)



Figure 4 – Martin Luther King Jr. Park (image credit: Richmond Community Foundation)



The San Jose site, Betty Ann Gardens, is a multifamily property owned by the nonprofit organization FCH, with 76 affordable homes for families in the Berryessa neighborhood of San Jose. On-site amenities include health and wellness programs, a community room and lounge, computer lab, and community garden. Residents currently receive free transit passes through a partnership between FCH and VTA. The site is served by multiple VTA bus lines, and will be about a ten-minute walk from the Berryessa/North San Jose BART station once it opens.

Figure 5 - Betty Ann Gardens (image credit: FCH)



Table 1 - Site details

City	Name	Site Type	Address	Population	On-Site Partners
Oakland	Lion Creek Crossings	Multifamily property	881 69th Avenue, Oakland	567 units, 1,607 residents	EBALDC, Related Companies
Richmond	Nystrom Neighborhood	Neighborhood	Bounded by Ohio Avenue, S 20th St, Cutting Blvd, and S 2nd St, Richmond	1,158 units, 3,999 residents ²	RCF, City of Richmond
San Jose	Betty Ann Gardens	Multifamily property	945 Lundy Ave, San Jose	76 units, 265 residents	FCH

EBALDC = East Bay Asian Local Development Corporation; FCH = First Community Housing; RCF = Richmond Community Foundation

Community Transportation Needs Assessment

Prior to implementing car sharing and mobility hubs services, the project team led a community transportation needs assessment process (“needs assessment”) to understand residents’ current travel behavior and identify their transportation needs and challenges. This in part was the result of lessons learned from CARB’s Senate Bill 350 Low-Income Barriers Report³ which highlighted this as a critical first step in identifying barriers, opportunities, and solutions best suited to meet the unique needs of residents in each community. The needs assessment also explored residents’ interest in each potential mobility option (e.g. bike sharing, transit passes) to determine which to prioritize for each site.

The needs assessment was designed to:

- Understand residents’ current transportation habits and needs.
- Understand challenges faced by residents in accessing and utilizing various mobility options for themselves and their family.
- Gauge residents’ current knowledge and interest in learning about and using new shared mobility options located at an on-site mobility hub.
- Understand the demographic profile of the residents.
- Collect baseline data to measure progress on project goals, e.g. access to destinations, mode shift, and car ownership.

² U.S. Census, 2010

³ California Air Resources Board. “Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents.” 2018.

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Conducting a needs assessment is a valuable first step, and empowers residents to shape the clean transportation investments happening in their communities. This is a key lesson for pilot project design, and an approach that can be modeled in other communities that want to increase access to clean transportation and mobility options.

The project team collected qualitative and quantitative data through paper surveys, focus groups, and individual interviews at each of the sites. In total, 583 surveys were received across all sites and 36 residents participated in 2 focus groups and 6 individual interviews. With the results provided in this report, the project team developed an implementation plan for a tailored mobility hub at each project site.

Purpose of this Report

This report was prepared to detail the steps taken by the project team to complete the needs assessment, summarize key findings, and share lessons learned. We intend for this report to serve as a helpful resource for other organizations considering conducting a transportation needs assessment in their own communities.

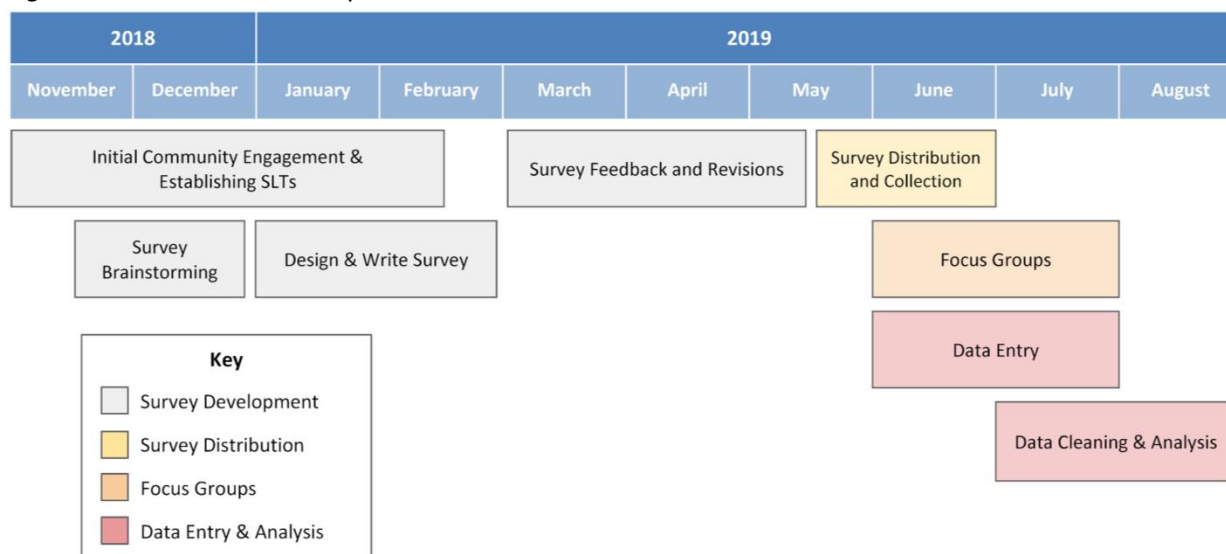
Methods

This section provides information on the approach taken to conduct a needs assessment in the Oakland, Richmond, and San Jose communities. These methods were intended to be unique and specific to the residents served, but can be replicated in other areas where applicable.

Timeline

An overall timeline of the activities conducted by the project team to complete the needs assessment is shown in Figure 6. Each site took varying approaches to this process, and the residents and on-site partners provided valuable knowledge on which strategies would work best for their communities.

Figure 6 - Needs assessment process timeline



SLT = Site Level Team

Designating Site Coordinators

Each on-site partner organization (EBALDC, FCH, and RCF) designated a Site Coordinator to guide site-level implementation throughout the course of the project, and serve as the main point of contact with TransForm. The estimated workload per Site Coordinator is 35-50% full-time equivalent (FTE). EBALDC and RCF each designated an existing staff member to serve this role, and FCH hired a new part-time staff member through a public job posting. Funding for these positions are provided through the CARB grant. Site Coordinator positions may not be necessary beyond the pilot phase of the project or may only be necessary at a lower FTE.

Site-Level Team (SLT) Recruitment

Each Site Coordinator led the effort to recruit residents to serve on the SLT for each site. The outreach strategies and administrative steps necessary to convene each group varied by site:

- **Oakland:** EBALDC staff first determined the stipend amount provided to each resident for their participation to be \$17 per hour. They developed a paper flyer to distribute to residents, advertising the opportunity to serve on the SLT (see Appendix A). The flyer was translated into Spanish and Arabic and posted publicly around the community (left at residents' doors, posted in common areas). The Site Coordinator interviewed potential residents individually. EBALDC and TransForm developed an SLT Membership Agreement for the SLT members to sign, which outlines their role, responsibilities, and process for receiving payment. The selected residents then entered an agreement with EBALDC as an independent consultant, in line with EBALDC's policies for residents serving in an advisory role. Each resident is required to submit a W-9 form and complete invoices on a regular basis to receive payment. Ongoing meetings are held at a community room on-site at Lion Creek Crossings.
- **Richmond:** The NURVE Policy Committee is a group of community stakeholders that meets regularly, and is convened by the City of Richmond. The committee guides the capital investment projects in the Nystrom neighborhood, such as the renovation of Nystrom Elementary School, streetscape improvements, and construction of a community center at MLK Jr. Park. To recruit residents to serve on the SLT, TransForm attended a NURVE Policy Committee meeting and provided a presentation about the mobility hubs project. Residents who were interested in joining the SLT shared their contact information. The Site Coordinator at RCF also conducted additional email outreach. The SLT now consists of residents from the Nystrom neighborhood, many of whom serve in other leadership roles in their community, including local churches and school parents' groups. The SLT also includes representation from neighborhood councils – the Nystrom neighborhood is not an official neighborhood (as defined by the City of Richmond) but includes portions of the Santa Fe and Coronado neighborhood councils. Richmond Community Foundation and the City of Richmond determined the most appropriate compensation for SLT members, a stipend of \$133 every two months, provided residents regularly attend meetings and complete tasks between meetings. SLT members also signed an SLT membership agreement. Ongoing meetings are held at RCF's office, which is centrally located in the Nystrom neighborhood.
- **San Jose:** The Site Coordinator at FCH designed a paper flyer to recruit SLT members (see Appendix A). Residents were invited to a general interest meeting held at the community room on-site at Betty Ann Gardens, and were compensated for their time with a \$25 gift card. Flyers were left at residents' doors and posted in common areas. The purpose of the meeting was to explain the project and the roles and responsibilities of SLT members. A number of residents expressed interest in joining the SLT, so TransForm and the Site Coordinator hosted a kickoff SLT meeting a few weeks afterwards. FCH staff determined the compensation plan for residents, a \$40 gift card for each meeting attended. At a later meeting, residents were asked to share which

gift cards they are most interested in receiving. SLT members also signed an SLT membership agreement. Ongoing meetings are held on-site at the Betty Ann Gardens community room.

The kickoff SLT meetings were held primarily to build initial trust and rapport between TransForm, the Site Coordinators, and the residents. SLT meetings are held on an ongoing basis throughout the course of the project. Multiple steps are taken to ensure that all team members are able to fully participate.

The following tasks are handled by the Site Coordinators or TransForm:

- Preparing and tracking stipends or gift card payments.
- Recording meeting attendance.
- Providing dinner and beverages as meetings are usually held on weekday evenings.
- Translating all meeting materials, including handouts and presentation slides. Each SLT includes Spanish-speaking residents.
- Providing Spanish language interpretation – two-way simultaneous interpretation using headsets.

In addition to sharing their knowledge and insight to help design each site's mobility hub, SLT members provided key feedback that shaped the needs assessment survey.

Survey Development

The survey document was developed through an iterative process led by TransForm and the Shared-Use Mobility Center (SUMC). To ensure that the survey represented the interests of the residents and multiple other stakeholders, the team took a collaborative approach, incorporating feedback at multiple stages.

If there are previously established processes for engaging the community, this step can be completed more quickly than the timeline in Figure 6 suggests. At the time, the project team was focused on initial community engagement and establishing SLTs, with survey development as a secondary focus.

Initially TransForm worked with staff at each site partner organization (EBALDC, FCH, RCF, and the City of Richmond) to brainstorm a list of topics or specific questions that they were interested in including in the survey. TransForm and SUMC also reviewed previous surveys, including EBALDC's annual resident survey and surveys from prior TransForm projects. Site Coordinators at all three sites indicated that paper surveys (rather than electronic) would be the most appropriate distribution method, since they present the fewest barriers for completion and would result in a more representative sample of the residents.

The team then authored a first draft of the survey and gathered feedback on the document from key stakeholders: MTC, CARB, PAC members, Site Coordinators, and additional staff from each site partner organization. Simultaneously, the draft survey was presented to SLT members for a pilot round of completion. Residents primarily gave feedback on which questions should be reworded for ease of use and topics they recommended adding or removing.

The final survey document is available in Appendix B. The survey is customized slightly for each site, so Appendix B indicates where differences occur. For all versions, the survey consists of a cover page and 34 questions printed on four double-sided sheets of paper and takes on average ten minutes to complete. The cover page includes a project overview and a “Key Terms” section - photos and definitions of relevant mobility options (e.g., EVs, car share, bike share, e-scooters, etc.). To minimize language barriers and promote local hiring, TransForm contracted with Ladon Language Services, a local social initiative, to translate the survey into Spanish, Chinese, and Arabic. These languages were chosen through input from Site Coordinators and residents.

With three versions of the survey translated into multiple languages, a total of nine variations of the survey needed to be printed. TransForm worked with a local printing company to print, staple, and deliver the surveys to each Site Coordinator.

Survey Distribution and Collection

The Site Coordinators and TransForm first determined the eligibility and incentive plan for distributing surveys. At all sites, residents needed to be 16 or older and a resident of the community (Lion Creek Crossings, Betty Ann Gardens, or within the Nystrom neighborhood boundaries). The project team piloted different approaches at each site to better understand the demand for gift cards and to ensure at least one person per household received a gift card for completing the survey. Site Coordinators managed the incentive budget for the needs assessment and decided the final incentive amount by site. Each resident received a gift card (\$15 - \$30) for completing the survey, with the following limitations by site:

- **Oakland:** No limit on the number of surveys per household, but maximum two gift cards per household.
- **Richmond:** No limit on the number of surveys or gift cards per household.
- **San Jose:** One survey and one gift card maximum per household.

The survey distribution plan varied by site, as summarized in Table 2:

Table 2 - Survey distribution and collection methods by site

Site	Surveyors	Distribution	Collection
Oakland	Lion Creek Crossings residents and one neighborhood resident	Door-to-door	- Majority of surveys completed in-person - Additional surveys turned in to Family Resource Center
Richmond	Site Level Team Members	- Door-to-door - Through community networks (e.g., churches, schools) - Community events (e.g. neighborhood clean-up day)	- Many surveys completed in-person - Additional surveys collected by the surveyors and returned to the Richmond Community Foundation office
San Jose	Site Coordinator	Door-to-door	- Site Coordinator returned to the apartments at a later date to collect surveys - Additional surveys turned in to the leasing office

Additional survey distribution and collection details by site:

- Oakland:** The Site Coordinator had prior experience administering surveys at Lion Creek Crossings (LCC) and followed a similar approach for this project. In line with EBALDC's policies, the Site Coordinator hired Community Surveyors through a public job posting open to residents of LCC and the general public. Community Surveyors are temporary EBALDC hires who are compensated with an hourly pay rate. The Site Coordinator hired a total of four Community Surveyors - three LCC residents and one neighborhood community member, including one bilingual Spanish speaker. The Site Coordinator hosted an in-person group training and practice run for the Community Surveyors. The surveyors then worked in pairs to conduct door-to-door outreach. The majority of the residents completed the survey and received their gift card in-person. Surveyors also left surveys behind and returned later in their shift to collect it. "Sorry we missed you" postcards were left when nobody was home, stating a date and time for residents to expect the surveyors to return. The Site Coordinator then returned to residents' apartments to collect surveys, or residents would return their completed survey to the on-site Family

Resource Center. Sample materials used by the Community Surveyors (e.g. gift card tracking logs) are included in Appendix A.

- **Richmond:** SLT members led the development of a plan for survey distribution and collection, drawing on their knowledge of the community to brainstorm which methods and venues would be most effective. Each SLT member picked up blank surveys and gift cards from the RCF office and conducted outreach within their own networks (e.g. church, school groups, neighborhood councils). Completed surveys and unused gift cards were returned to the RCF office. The SLT also surveyed at local community events (e.g. neighborhood clean-up day). As a final effort, the SLT gathered on a weekend afternoon to conduct door-to-door outreach in English and Spanish throughout the Nystrom neighborhood and at Nystrom Village, a central location within the Nystrom neighborhood.
- **San Jose:** The Site Coordinator managed survey distribution and collection through door-to-door outreach. Since Betty Ann Gardens has fewer units than Lion Creek Crossings (76 units vs. 567 units), a team of surveyors was not necessary. The Site Coordinator allowed residents to complete the survey in-person (e.g., at their home, during community events), or complete it on their own time. The Site Coordinator returned at later dates to collect completed surveys and to follow-up with residents who had not completed their survey. Residents also had the option to turn their survey in at the on-site leasing office. When nobody was home, the Site Coordinator taped a copy of the survey to the door.

In total, 583 surveys were collected across the three sites. Table 3 below shows the total number of surveys collected and Table 4 shows the response rate for each location.

Table 3 - Total surveys collected

Site	English	Spanish	Chinese	Arabic	Total
Oakland	182	18	32	3	235
Richmond	183	133	-	-	316
San Jose	28	4	-	-	32
Total	393	155	32	3	583

Table 4 - Survey response rate

Site	Surveys Collected	Site Population	Response Rate
Oakland	235	Total units: 567 Total residents: 1,607	15% of residents
Richmond	316	Neighborhood population: 3,999	8% of residents
San Jose	32	Total units: 76 Total residents: 265	42% of households (restricted to 1 survey per household)

Focus Groups

Focus groups were hosted at each site to gain a qualitative understanding of residents' transportation habits and challenges. Participants were randomly selected among those who responded "Yes" to survey question #33, asking if they would be interested in participating in a small group interview in exchange for a gift card. The selected individuals were then filtered by age, ethnicity, and public transit use in order to create a representative array of participants.

Participants received \$15-30 gift cards, and a meal and beverages were provided. Spanish translation and interpretation was provided as necessary. TransForm and the Site Coordinators attempted to host focus groups at all sites, but despite sufficient RSVPs and follow-up emails, only one resident attended the adult focus group in Oakland and no residents attended in Richmond. Aside from completing the survey, these residents had not been engaged in this project previously, which may have contributed to the low turnout. To remedy this, TransForm scheduled and conducted individual interviews via phone for residents at these two sites. Overall, a total of two focus groups and six individual interviews were conducted: one youth focus group in Oakland (n=16), one adult focus group in San Jose (n=14), four adult individual interviews in Oakland, and two adult individual interviews in Richmond.

Focus groups ran for one to two hours and were led by one facilitator and one note-taker. An introduction was given on the project's purpose and goals, allowing participants to fully understand the role of the focus group and to ask clarification questions. The group then participated in a guided discussion, following a list of 12 questions about their current transportation habits and challenges, their interest in adopting new shared mobility options, and their recommendations for transportation improvements at their residence. The full list of questions is included in Appendix C. Individual interviews followed a similar format, but typically lasted about 30 to 45 minutes.

Data Entry

TransForm created electronic versions of the three surveys using Google Forms, a free survey administration application. The responses from the paper surveys were then entered into the Google Forms by various project stakeholders:

Table 5 - Data entry strategies by site

Site	Data Entry Strategy
Oakland	• TransForm entered English surveys • Ladon Technologies entered Spanish, Chinese, and Arabic
Richmond	• SLT members, City of Richmond, and RCF interns entered English and Spanish surveys
San Jose	• FCH staff entered English and Spanish surveys

FCH = First Community Housing; RCF= Richmond Community Foundation; SLT = Site Level Team;

Translation was necessary, since the surveys included free response questions in multiple languages. For the Oakland surveys completed in Spanish, Chinese, and Arabic, TransForm scanned the paper surveys to PDF and shared the files with Ladon Technologies. Ladon staff then translated responses into English and entered the results into the Google Forms. For the Richmond and San Jose surveys completed in Spanish, bilingual data entry staff translated the responses into English.

In Richmond, three SLT members were provided additional compensation at \$20 per hour for assisting with data entry. The SLT members received in-person training from the Site Coordinator and TransForm, and then performed data entry on their own time at the RCF office.

Data Cleaning

Once the surveys were entered into Google Forms, TransForm exported the results to three Excel file datasets and took the following steps to complete an initial round of data cleaning:

- Confirmed survey eligibility criteria of age 16 and above.
- Removed duplicate Google Forms entries.
- Confirmed a 1:1 match between paper surveys and Google Forms entries.
- Addressed non-standard or contradictory responses, for example:
 - Selecting “none of the above,” but also selected other options for a single question.
 - Selecting multiple answers for a single-response question.

Data entry staff also indicated when certain survey responses could not be entered into the Google Forms due to an irregular response, e.g. if the handwriting was illegible, text was written in the margins of the paper, or the respondent used a check-mark for a question asking for a number. The staff used a

highlighter to mark the area of the paper survey with the irregularity. Once TransForm received all of the completed paper surveys, they reviewed and made decisions on how to address the irregularities to ensure that valuable insights were included from each survey respondent.

TransForm provided SUMC with the dataset files to complete additional data cleaning and analysis. SUMC limited consideration to respondents who lived at or adjacent to the project areas using GIS software to geocode the addresses and verify locations. Addresses that were blank or illegible were assumed to be within the project areas, while responses that provided addresses that were affirmatively outside the project areas were removed. SUMC and TransForm decided to remove surveys from non-residents in order to prioritize the input of those who will be served by the pilot project. The datasets were updated to only include the following:

- **Oakland:** resident of Lion Creek Crossings.
- **Richmond:** resident of the Nystrom neighborhood, or within one mile of the boundary. Approximately 75% of the received surveys were within the Nystrom boundary. The project team decided to extend the boundaries by a one mile radius in order to include an additional 19% of the received surveys.
- **San Jose:** resident of Betty Ann Gardens. Two surveys were completed by residents of Creekview Inn, an affordable housing property adjacent to Betty Ann Gardens that is also owned by FCH. The project team decided to include their surveys since they are living next door to the upcoming mobility hub.

SUMC performed additional data cleaning and coding of responses to ensure that all responses could be interpreted as either categorical or numerical, as appropriate.

Data Analysis

SUMC conducted the analysis of the survey results using Excel. The “Other” and open-ended responses were reviewed individually for common themes (e.g., many respondents wrote “Retired” for question #23), in order to create new categories and quantify the results. Without needing to purchase advanced statistical software, this level of analysis can be performed to yield useful results.

Results

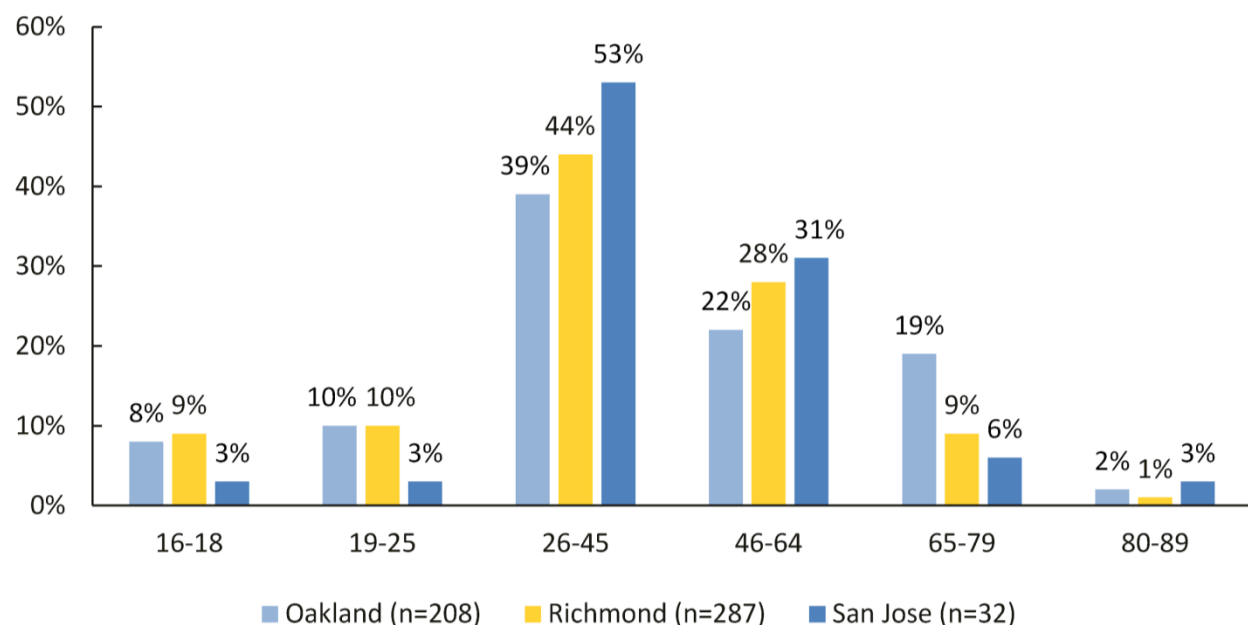
The key findings from the surveys and focus groups are included below. The detailed results for each survey question, including a summary of the free-response submissions, are available in Appendix D. Since the survey is customized slightly by site (some questions were only asked at certain sites), the question numbers shown in this section of the report (abbreviated with a “Q”) may differ from the question numbers shown in the survey document (Appendix B).

SLT meetings were held at each site to share these key findings with residents and provide them with the opportunity to respond and offer any additional insights based on their personal experience. Dataset files are available to be shared with Site Coordinators upon their request.

Demographics

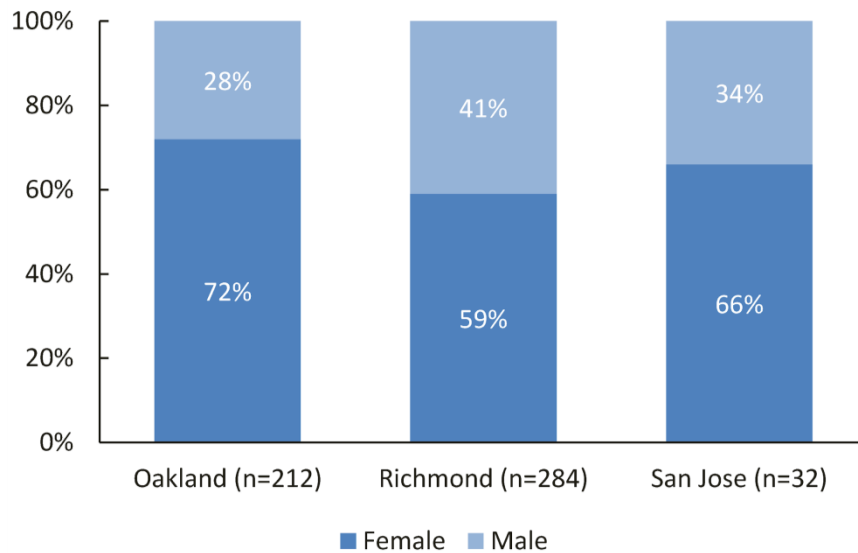
Survey respondents range in age from 16 to 88 (Mean age for Oakland=44.8, mean age for Richmond=41.5, and mean age for San Jose=43.7) (see Figure 7).

Figure 7 - Q.20: Age



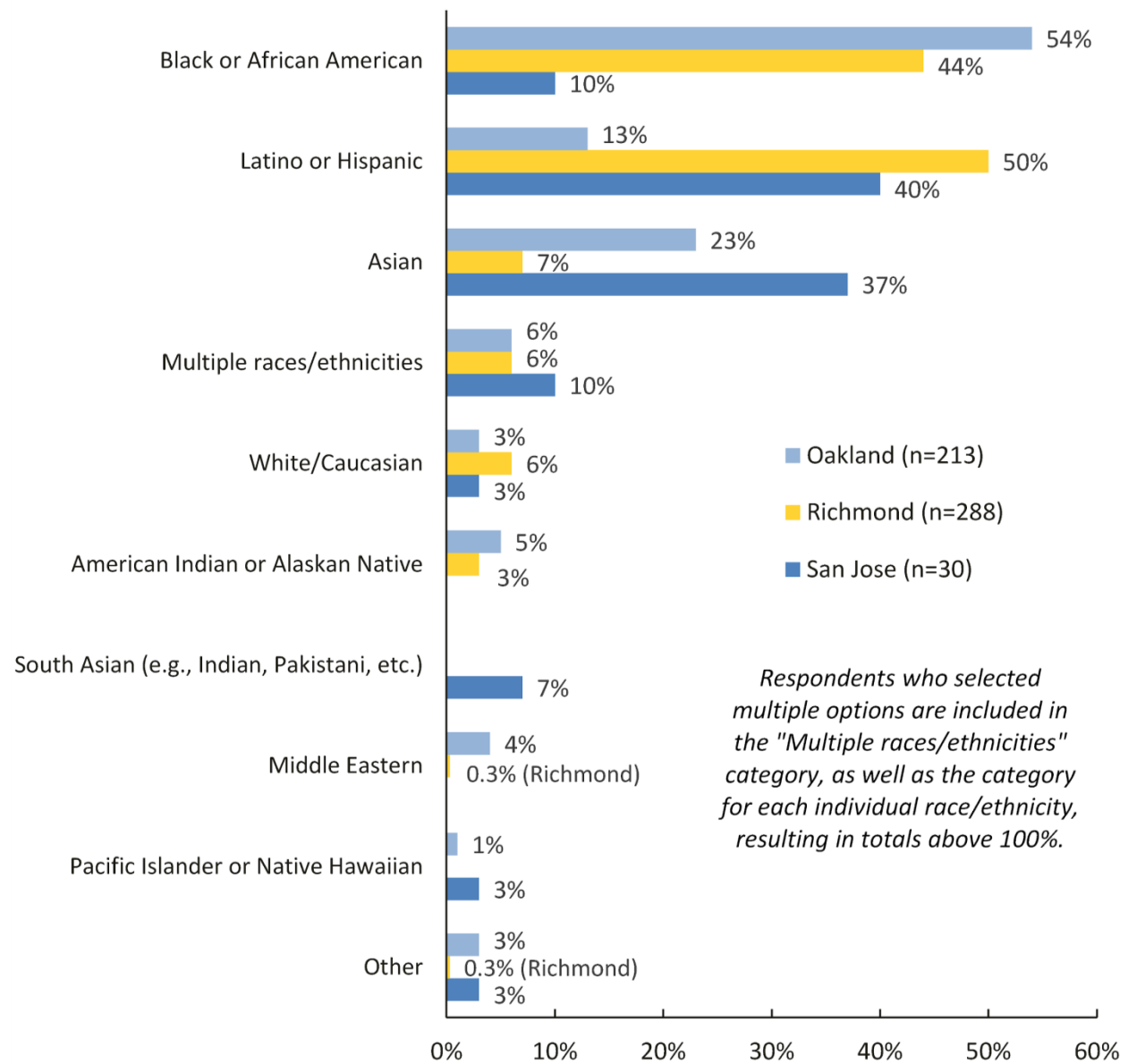
For all project sites, a majority of survey respondents identify as female (72% in Oakland, 59% in Richmond, and 66% in San Jose) (see Figure 8).

Figure 8 - Q.21: Gender



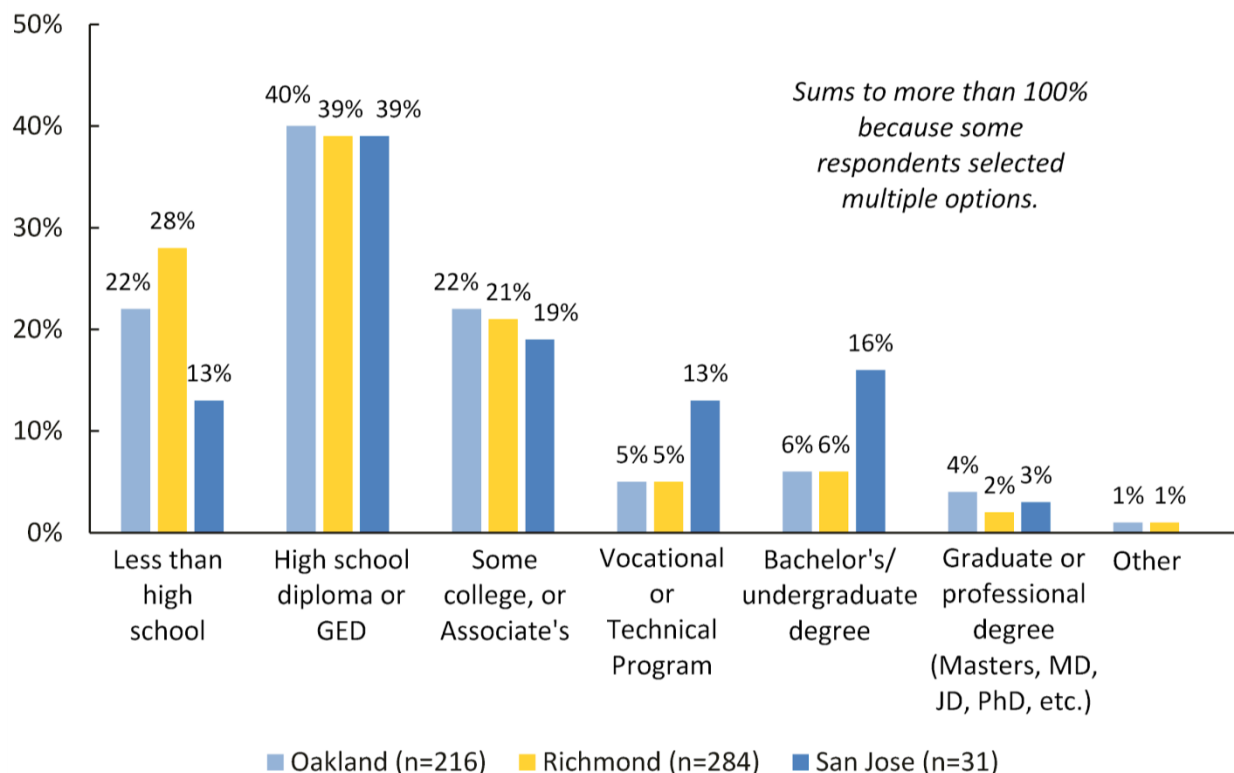
Race and ethnicity varied by site, but overall the respondent pool is ethnically diverse. For Oakland, respondents are 54% Black or African American, 23% Asian, and 13% Latino or Hispanic. Half of Richmond respondents (50%) identify as Latino or Hispanic, 44% as Black or African American, and 7% as Asian. Nearly half of San Jose respondents (40%) are Latino or Hispanic, 37% Asian, and 10% Black or African American (see Figure 9).

Figure 9 - Q.24: How would you describe your race/ethnicity? (check all that apply):



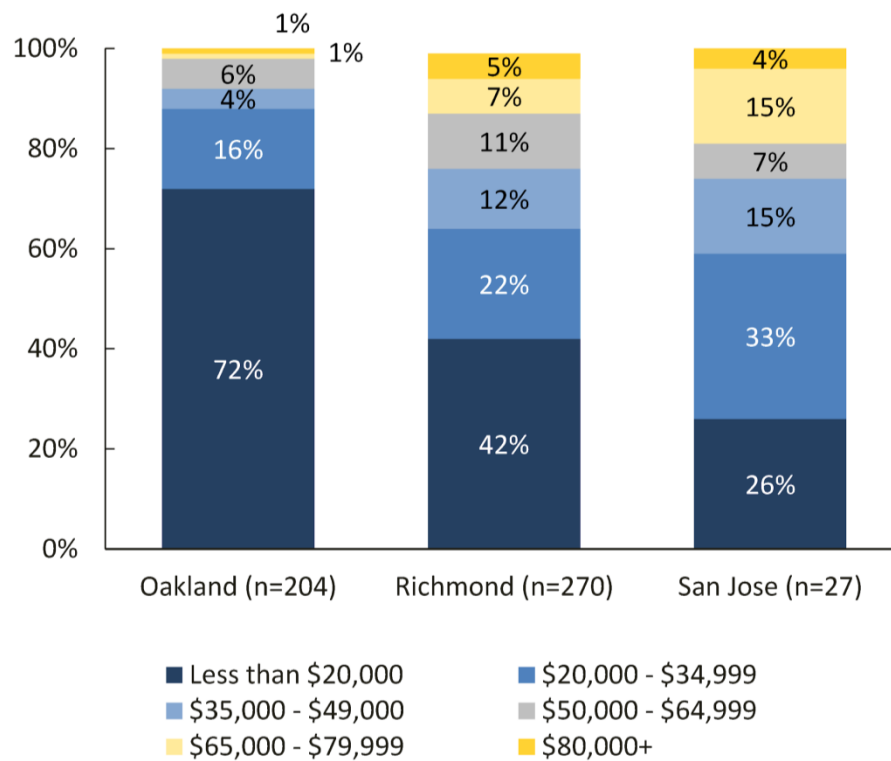
More than a third of survey respondents reported the highest level of education completed as a high school diploma or GED (40% in Oakland, 39% in Richmond, and 39% in San Jose) and roughly 20% of respondents reported completing some college or an Associate's degree (22% in Oakland, 21% in Richmond, and 19% in San Jose) (see Figure 10).

Figure 10 - Q.25: What is the highest level of education you have completed?



The majority of Oakland respondents (72%) report an annual household income of less than \$20,000, with an average household size of 2.9 people. 42% of Richmond respondents report an annual household income of less than \$20,000, with a larger average household size of 4.0 people. In San Jose, almost one third (26%) of respondents have an annual household income of less than \$20,000, with an average household size of 3.3 people (see Figure 11).

Figure 11 - Q.28: What is your annual household income?

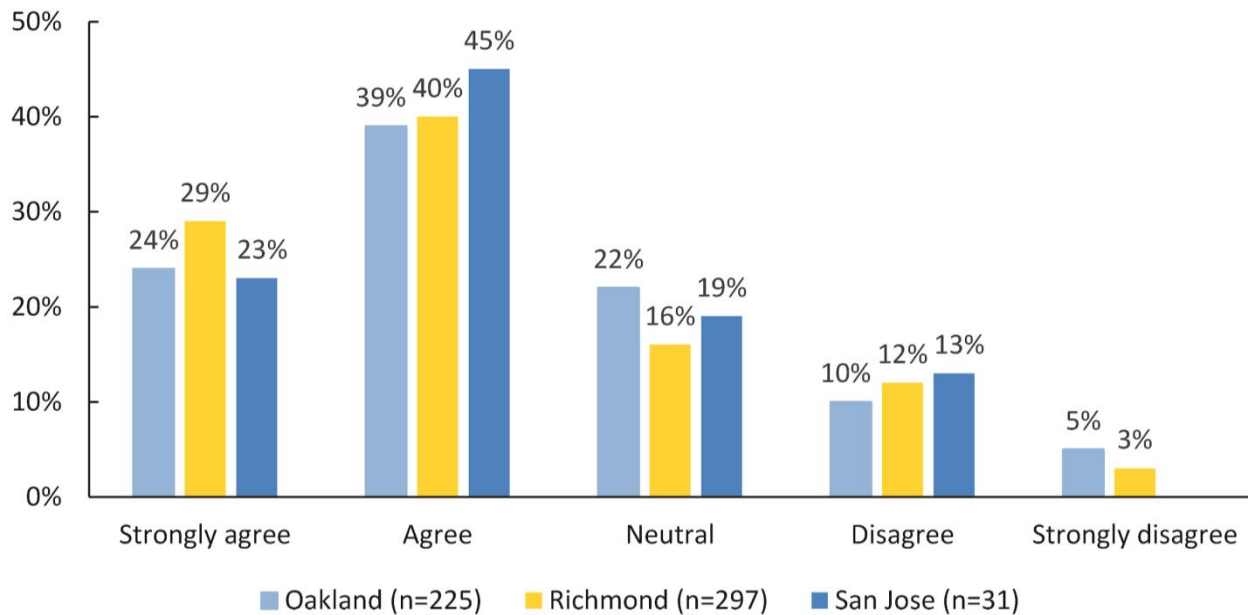


Current Transportation Behavior and Preferred Transportation Benefits

Overall Ability to Access Destinations

When asked if they agree with the statement “It is generally easy for me to get to where I need to go,” the majority of residents at each site agreed with the statement. A significant portion selected “neutral” or “disagree,” but very few selected “strongly disagree” (see Figure 12).

Figure 12 - Q.1: It is generally easy for me to get to where I need to go:

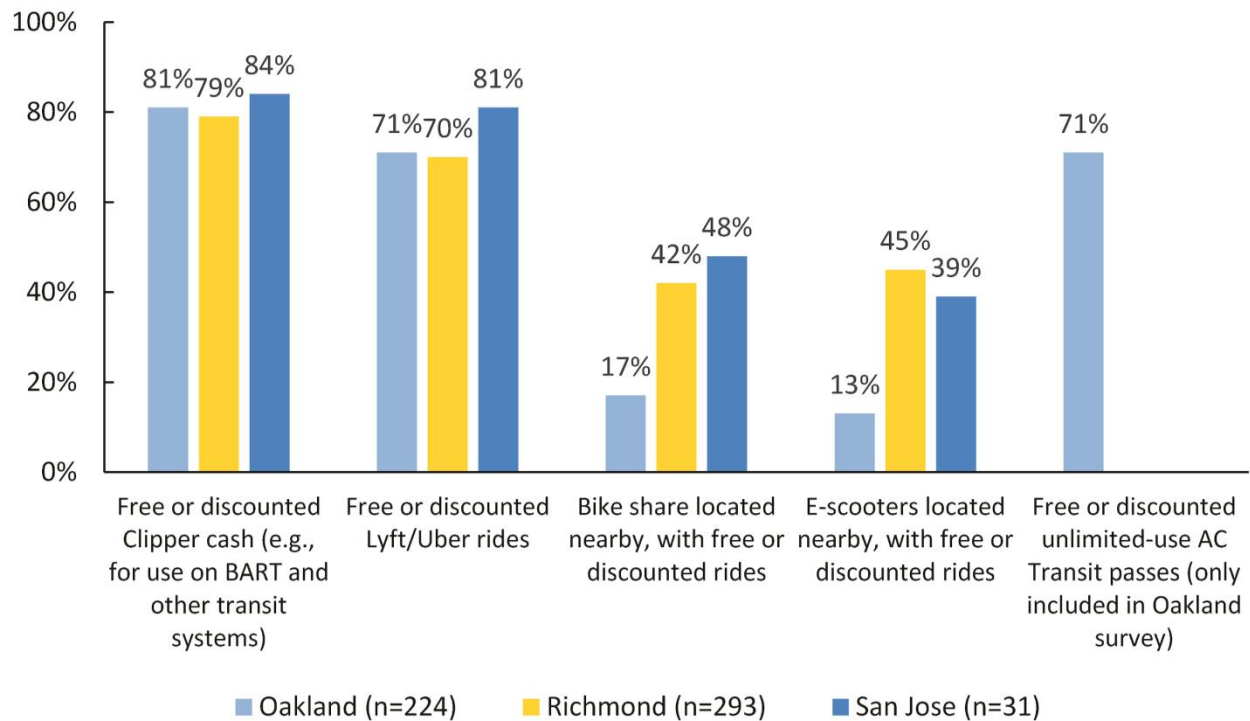


Focus group and individual interview participants were asked if they are “able to currently meet their everyday transportation needs.” Several participants discussed challenges with their current modes of travel, mainly related to public transportation. In San Jose, participants mentioned issues with bus schedules and drivers not stopping to pick them up. One of the participants spoke about how she “works on Sunday mornings, but the bus system does not begin running until after the start of my first shift (7:30AM).” Another participant in Oakland mentioned overcrowding on AC Transit buses and BART and a lack of consideration for seniors and disabled riders like herself. Participants who own a car reported less difficulty meeting their travel needs, but noted that it was difficult to share one car between family members and would like to have affordable access to additional cars, especially for last-minute needs.

Preferred Transportation Benefits

Survey respondents were asked to select the three transportation benefits they are most interested in receiving through the mobility hubs project. At all project sites, the most popular options were “free or discounted Clipper cash” and “free or discounted Lyft/Uber rides.” Clipper Cash is a dollar value loaded onto a reusable Clipper card that is used for paying fares at the majority of Bay Area transit agencies (e.g. bus, BART, Caltrain, ferries). “Free or discounted unlimited-use AC Transit passes,” only included in the Oakland survey, was also a popular option. The project team would purchase discounted bus passes through AC Transit’s EasyPass program to be administered to residents. E-scooters or bike share located nearby, with free or discounted rides, were less popular options (see Figure 13). This may be partially explained by the current unavailability of shared mobility options at each site (for example, Richmond does not have a bike share system).

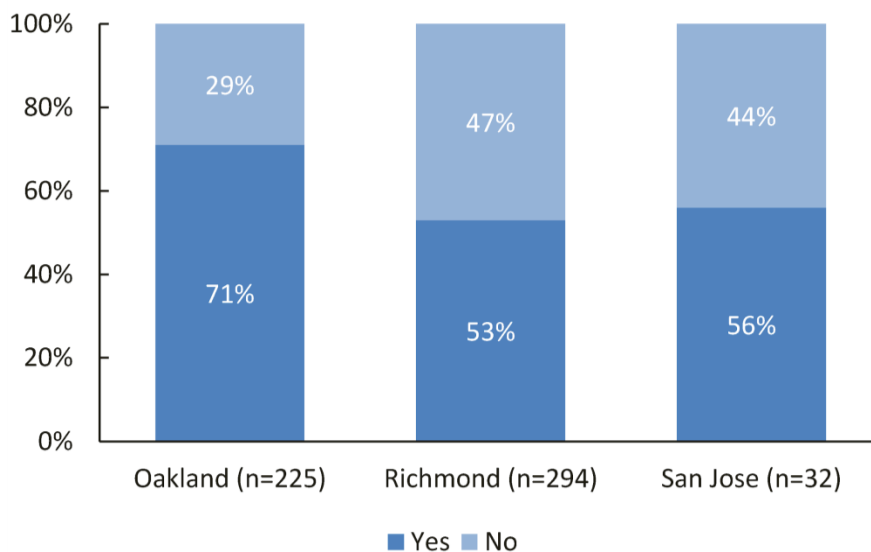
Figure 13 - Q.2: Which of the following would you like to have available at [location] for you and your neighbors? Please select the 3 choices that you are most interested in:



Public Transportation

The majority of survey respondents at each site take public transportation “regularly.”

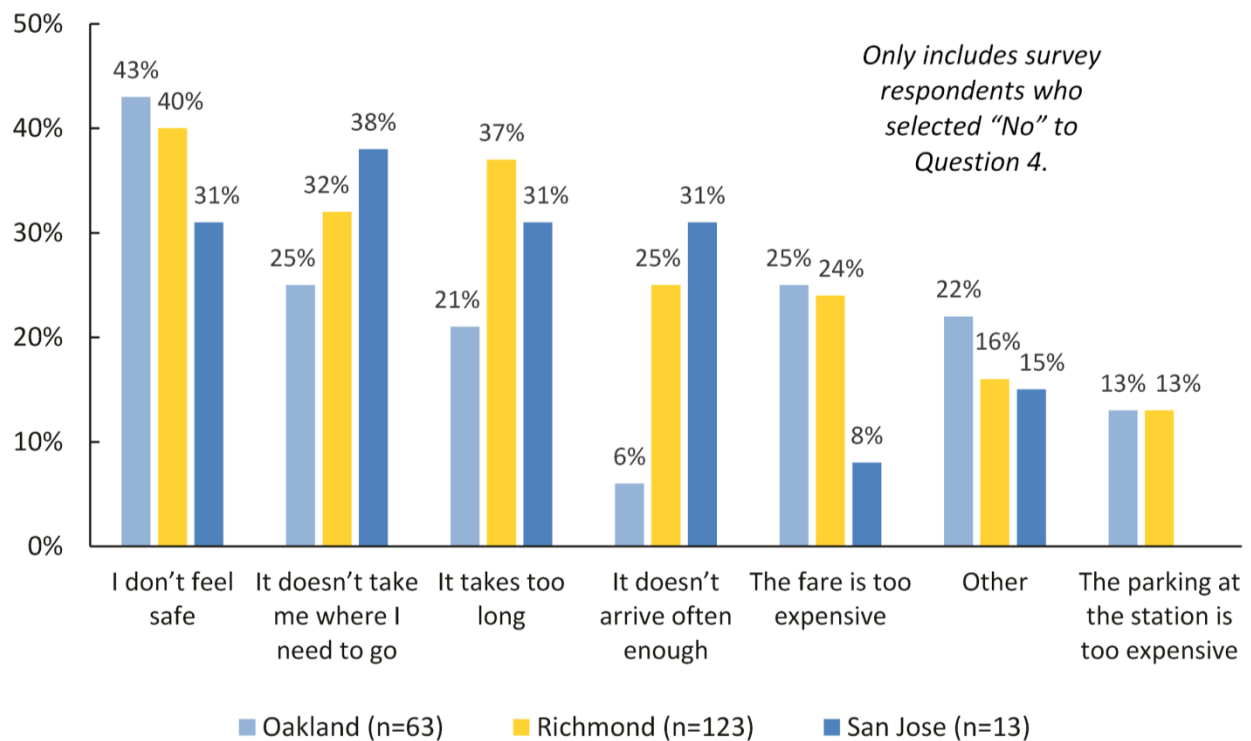
Figure 14 - Q.4: Do you use public transit (e.g., bus, BART) regularly?



Oakland residents ride transit the most frequently, with 37% taking bus/light rail at least once a week and 35% taking BART at least once a week. Fewer Richmond respondents report using bus/light rail (18%) and BART (13%) at least once a week. San Jose has the highest rate of bus/light rail riders, with 44% taking bus/light rail at least once a week. San Jose residents currently receive a free transit pass through a partnership between FCH and VTA, which may partially explain this. Only 3% of San Jose respondents ride BART at least once a week. This is unsurprising as San Jose does not currently have a BART station. Once the Berryessa/North San Jose BART station opens, it will be about a ten-minute walk from Betty Ann Gardens.

Of the survey respondents who do not take public transportation, many mentioned safety as their main reason for not using the service. Respondents also indicated that public transportation “doesn’t take them where they need to go” and that public transportation “takes too long.” In Oakland and Richmond, 24 to 25% reported difficulty affording transit fare. As one Oakland resident expressed, “*sometimes my family doesn’t always have bus fare for me to get to school.*” Fewer San Jose respondents (8%) selected this option, likely because they are currently receiving free transit passes (see Figure 15).

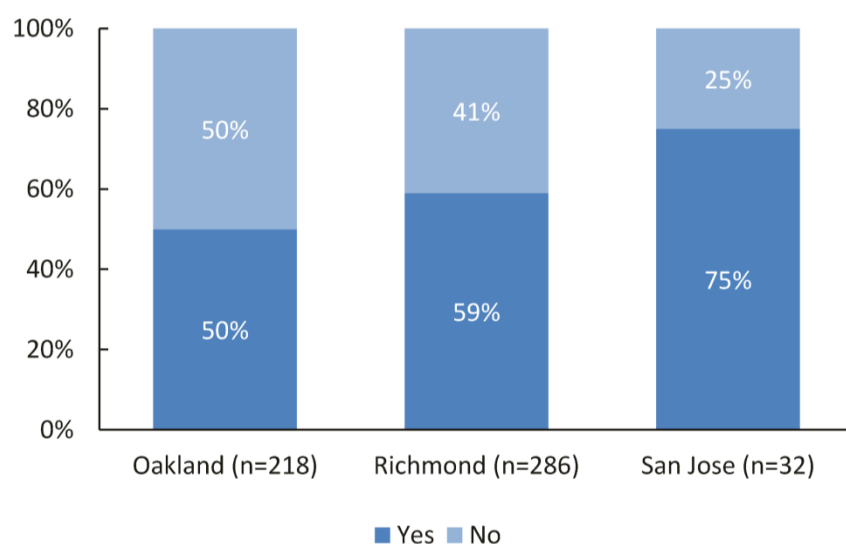
Figure 15 - Q.5: If you do not use public transit regularly, please indicate why (check all that apply):



Driving Alone, Driver's License Ownership and Cars per Household

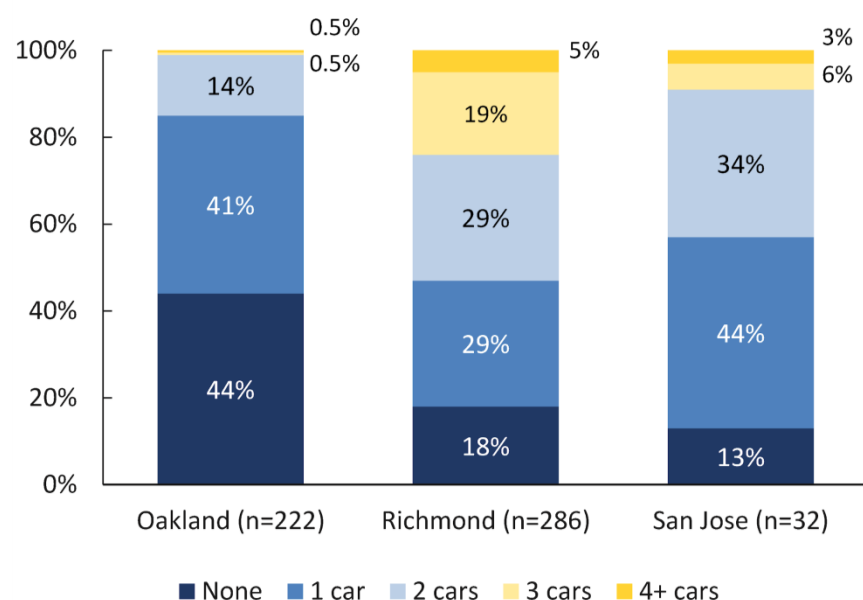
More than a third of Oakland respondents drive alone at least once a week, with higher numbers for Richmond (49%) and San Jose (57%). However, 25 to 50% of respondents do not have a driver's license (see Figure 16). This finding indicates the need to provide mobility strategies that do not require a driver's license (e.g., transit passes, Lyft/Uber rides). The project team will also explore alternative options for these residents, such as a car share ambassador program for residents to drive their neighbors to their destinations (e.g., medical appointments, grocery stores, work, school, etc.). Lastly, the project team will reduce the number of electric vehicles provided at each site, since the demand for car share services is expected to be lower than originally estimated.

Figure 16 - Q.10: Do you have a driver's license?



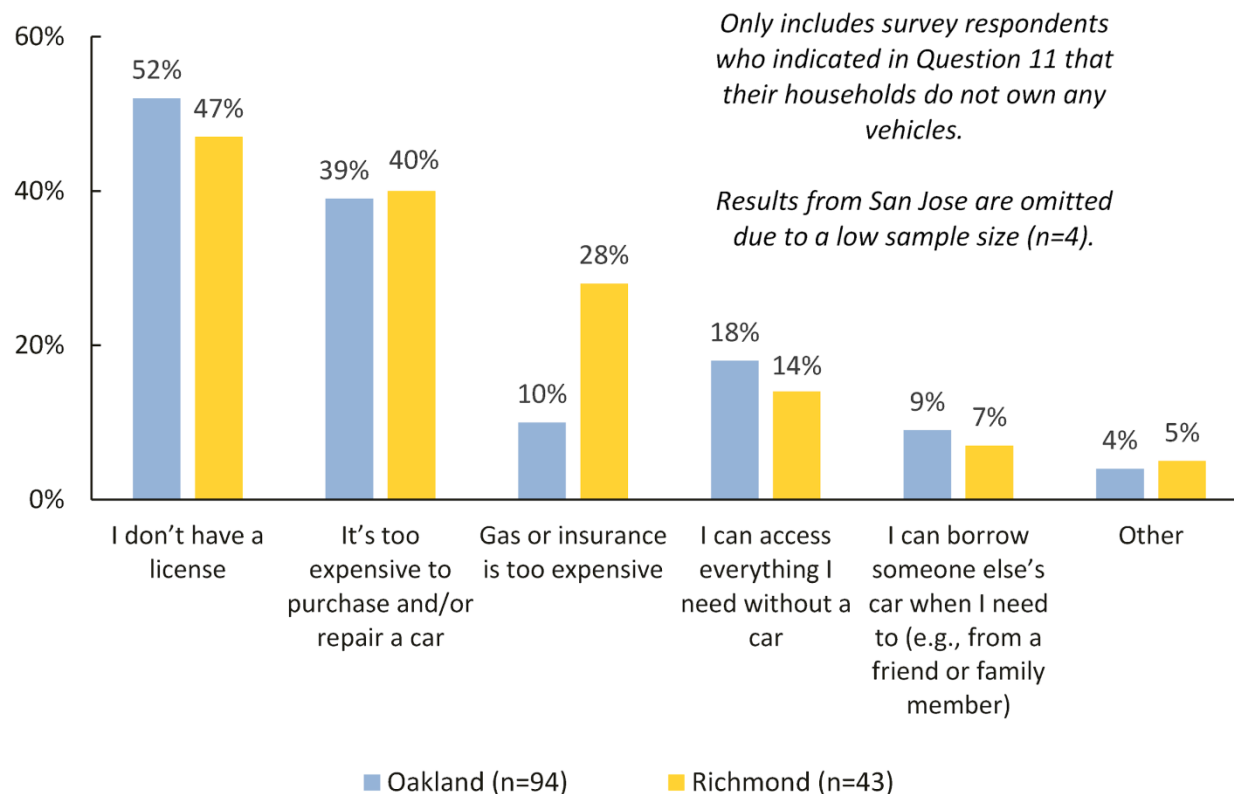
Car ownership varies by site. At 85% Oakland has the highest rate of 0 or 1-car households, followed by San Jose at 57%, and Richmond at 47%. In Oakland, almost half of respondents do not own a car (44%) (see Figure 17).

Figure 17 - Q.11: How many cars does your household own or lease?



Among those who do not own a car, the most common reasons reported were “I don’t have a license” and “it’s too expensive to purchase and/or repair a car” (see Figure 18).

Figure 18 - Q.12: If you do not own or lease a car, please indicate why (check all that apply):



Walking, Biking, Shared Mobility and Other Forms of Transportation

The majority of respondents do not ride a bicycle “regularly” (82 to 94%), and 5 to 9% reported that they ride a bicycle at least once a week. For Oakland and Richmond respondents, “I’m not interested in biking” was the most selected option for not biking regularly, but respondents also listed “I don’t feel safe biking in the street,” “I can’t bike to where I need to go,” and “I don’t have a safe place to store my bike.” In San Jose, residents’ main barriers to biking were “It’s too expensive to buy and/or maintain a bike,” “I don’t have a safe place to store my bike,” and “I can’t bike to where I need to go.”

Roughly 35 to 50% of residents indicated that they walk at least once a week. Other transportation methods, including shared mobility services, are less frequently used by survey respondents. Lyft and Uber are used infrequently, as 6 to 16% of respondents reported taking Lyft or Uber at least once a week. During interviews, Oakland respondents’ main concern with Lyft and Uber were regarding the driver’s inability to locate where to pick them up. For example, a resident shared *“One time I called an Uber to get to a dentist appointment, but they didn’t know how to get in here and canceled the ride and I didn’t make it to the dentist.”* Oakland participants agreed that creating a designated drop-off and pick-up location could resolve this issue. Lastly, youth in Oakland and other interview respondents at each site reported safety as a concern for using Lyft and Uber.

Regarding bike share and e-scooters, 0 to 6% reported use of the services at least once a week. Additional details on the frequency of use for each travel mode are available in Appendix D, question #17.

Familiarity with New Shared Mobility Options and Interest in Car Share

Familiarity with New Shared Mobility Options

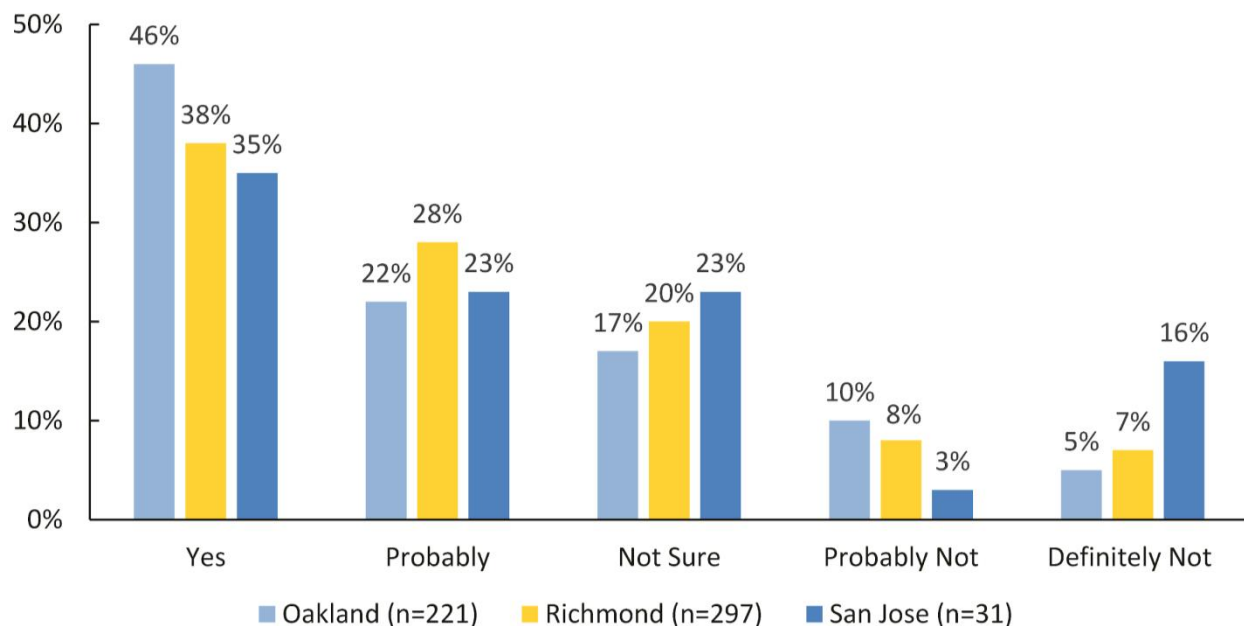
Shared mobility enables users to gain short-term access to transportation modes on an as-needed basis. For the purposes of this report, the term *new shared mobility* includes car share, bike share, e-scooter share, and rideshare (Lyft/Uber). Several survey respondents were unfamiliar with new shared mobility options. More than half of respondents are “not familiar” with car share (54 to 68%) and similarly with electric cars (48 to 63%). Respondents are also “not familiar” with bike share (59 to 63%), e-bikes (61 to 67%), and e-scooters (48 to 60%), which offers some explanation for the low reported frequency of use. Respondents have more familiarity with Lyft/Uber (72 to 77%) and public transit (85 to 94%). Based on high rates of unfamiliarity with some forms of new shared mobility among survey, focus group, and individual interview respondents, the project team has identified an opportunity for additional outreach and education to build community awareness.

Interest in Car Share

A majority of respondents are interested in car sharing, with 58 to 68% of respondents answering “yes” or “probably” when asked “If car sharing was available at [project site location], would you be interested in using it?” (see Figure 19). However, many respondents misunderstood car sharing to involve sharing a

ride with others, as was indicated in the free response submissions. Some responded favorably because of this (e.g. to save money on gas by carpooling), and others responded unfavorably (e.g. they feel unsafe riding with a stranger).

Figure 19 - Q.3: If car sharing was available at [location], would you be interested in using it?

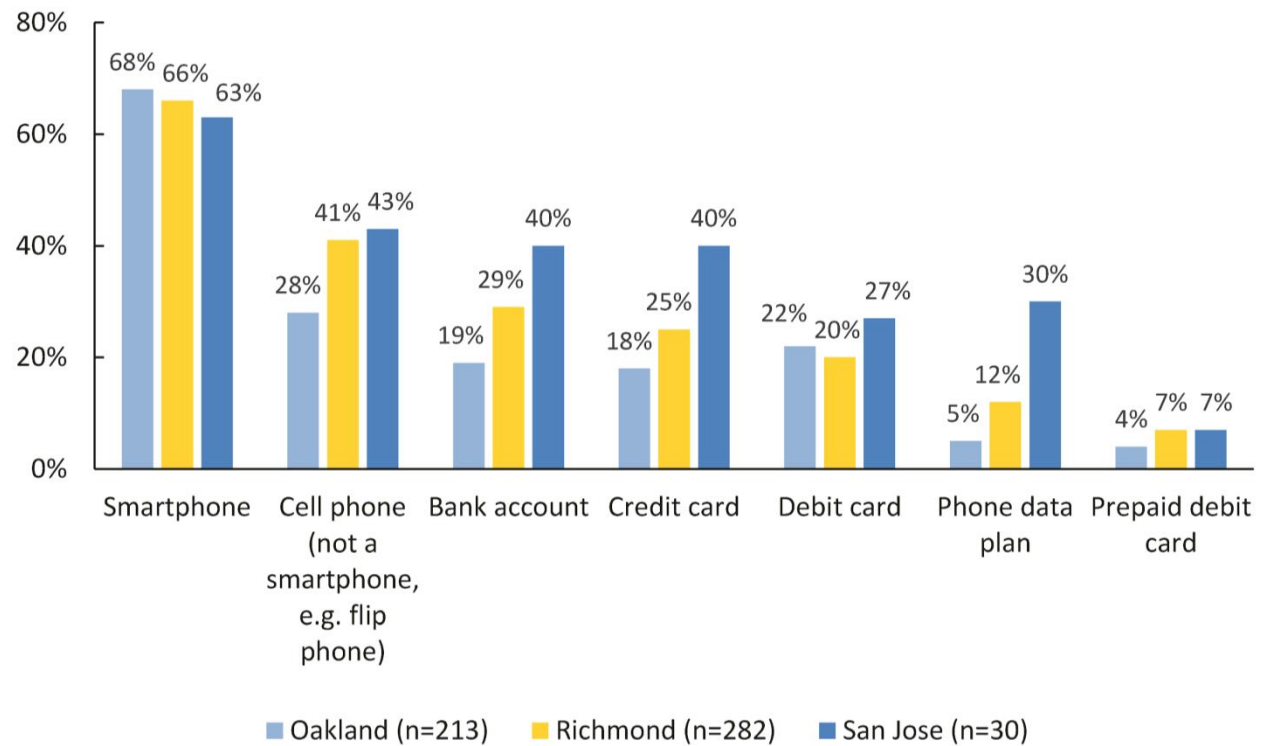


Most focus group and individual interview participants had never tried car sharing before, but were interested in the service if it was affordable and located nearby. One Oakland resident said “*I would consider using the service for grocery trips if the fees were cheaper than taking a Lyft or Uber*” and that car sharing would help meet the needs of many residents who have trouble accessing a “*full service grocery store without a car,*” especially since East Oakland is a food desert. Residents did express concerns with car sharing, mainly around ensuring the cars are well-maintained and that each resident follows the rules for service.

Banking, Debit/Credit Card Access and Phone Technology

Most survey respondents do not regularly use a bank account, credit card, or debit card, and far fewer residents reported using a prepaid debit card (4 to 7%) (see Figure 20). Many shared mobility providers require users to have a credit or debit card for registration and payment, which could prevent unbanked residents from using their services. The survey also assessed residents’ use of cell phones and smartphones, as many shared mobility services are accessed through a mobile phone app. Fortunately, the majority of survey respondents use a smartphone (63 to 68%), but this still leaves a sizable portion (32 to 37%) that may be unable to access these services. The project team will explore existing resources to connect residents with free or discounted smartphones (e.g., the California Lifeline Program) and market these programs to residents. The project team will also explore existing and potential options, including cash payments, for providing residents with better access to shared mobility services without requiring a smartphone, credit card, or debit card.

Figure 20 - Q.26: Which of the following do you use regularly? (check all that apply):



Discussion and Lessons Learned

This section details key findings from the needs assessment results and how they were used to shape an implementation plan for each site's mobility hub. The section also captures costs (personnel and non-personnel) and highlights lessons learned for organizations to consider when conducting a needs assessment process.

Key Findings from Needs Assessment Results

The needs assessment process allowed for a critical analysis of residents' unique transportation needs and challenges and interest in new shared mobility options. The data collected from residents enabled the project team to effectively develop a flexible implementation plan for mobility hubs at each site. Key findings from the results include:

Current Transportation Behavior and Preferred Transportation Benefits

- **The majority of residents ride public transit regularly, and for many it is their main mode of transportation.**
- **Residents may not be aware of discounted transit programs that they qualify for.** As the project team learned through meetings with residents, not all residents are aware of the following: how to obtain a Clipper card, fare discounts through the use of a Clipper Card, senior transit passes, and youth transit passes. The project team will promote these programs to residents through the outreach and education program.
- **Personal safety is a major concern among residents.** For many, a personal vehicle is the safest option to get around, as they do not feel safe walking, biking, or taking transit. The project team will pursue strategies to increase safety at the mobility hubs, such as including input from residents and other stakeholders on which physical locations will be safest, particularly at night.
- **Residents are most interested in Clipper cash, AC Transit EasyPasses, and Lyft/Uber rides. Residents are less interested in bike share and e-scooter share.** However, residents overwhelmingly indicated that they are unfamiliar with bike sharing and e-scooters, so there is an opportunity for the project team to build awareness of these clean transportation options.

Familiarity with New Shared Mobility Options and Interest in Car Share

- **Overall, residents are interested in car sharing, but need more information in order to better understand the benefits this kind of program can provide.** The majority of residents at each site are interested in using the program. However, the majority of residents also reported that they are unfamiliar with car sharing and electric vehicles. This finding points to the importance

of strong outreach and education to build awareness and offer training to residents once the mobility hubs are up and running.

- **Many residents do not have a driver's license**, which has major implications for implementing the car sharing program. 25 to 50% of residents (all of driving age, 16 and older) will not be able to use the program as a driver. This indicates a need to provide services that do not require a driver's license, such as transit passes. The project team will also explore alternative options for these residents, such as a car share ambassador program for residents to drive their neighbors to their destinations (e.g., medical appointments, grocery stores, work, school, etc.). Lastly, the project team will reduce the number of electric vehicles provided at each site, since the demand for car share services is expected to be lower than originally estimated.
- **In Oakland and San Jose, the majority of households own zero or one car(s)**. Households with low car ownership are expected to benefit the most through the car sharing program. Residents expressed interest in using car share for errands, last-minute needs, and when their household's other car(s) are in use by someone else.
- **Cost is a concern among residents, both for the new services (car sharing, bike sharing, etc.) and for paying transit fares**. Many residents reported that they have been unable to afford the cost of transit fares.
- **Residents expressed interest in having access to clean transportation options and reducing their environmental impact**. Although the survey did not directly address the topic, several residents reported this in the free response sections.

Banking, Debit/Credit Card Access, and Phone Technology

- **The majority of residents do not regularly use a bank account, credit card, debit card, or prepaid debit card**. Since many mobility services require at least one of these options, the project team will pursue cash payment options and other strategies to serve unbanked residents based on their specific needs.

Personnel and Non-Personnel Costs

This section includes a general overview of the costs associated with conducting a needs assessment.

Personnel Costs

Extensive support was needed from the Site Coordinators and residents to complete the needs assessment. Table 6 describes Site Coordinators' hours spent on needs assessment activities. The project team strongly recommends that anyone undertaking a similar effort hire Site Coordinators, as it is crucial to have someone who is connected to the community to uplift and incorporate residents' voices throughout the entire needs assessment process. Site Coordinators handled meeting logistics

(e.g. room reservations, confirming RSVPs with residents), training and supervising community surveyors, and other necessary tasks.

Table 6 - Site Coordinator hour estimates during peak needs assessment activities (four to six month period)

Site	Total Hours
Oakland	188
Richmond	85
San Jose	200

Table 7 includes the hours and pay rate for residents involved with the needs assessment through survey outreach or data entry.

Table 7 - Additional staffing cost to support survey data collection and data entry

Site	Role	Total hours and cost	Responsibilities
Oakland	(4) Community Surveyors	Total Hours: 184.92 Rate: \$17/hour Total Cost: \$3143.64	Door-to-door outreach to collect surveys
Richmond	(3) SLT Members	Total Hours: 18 Rate: \$20/hour Total Cost: \$360	Survey data entry
San Jose	The San Jose site did not hire additional staff for needs assessment activities. All survey outreach and data entry activities were completed by the Site Coordinator and FCH staff members.		

FCH = First Community Housing; SLT = Site Level Team

Non-personnel Costs

The non-personnel costs for the needs assessment are shown in Table 8. “Translation” includes translating the draft and final survey into three languages as well as translation and data entry of the completed non-English surveys. All translation services were completed by Ladon Technologies. It is important to consider sufficient funding for translation, especially for additional services beyond document translation (e.g., data entry support for non-English surveys). “Printing” includes printing and delivery of the final survey to each site.

TransForm engaged residents at multiple stages during the survey development and implementation process (e.g., focus group meetings, testing the draft survey) and hosted several morning and evening

meetings. For each meeting TransForm provided food and beverages to help minimize participation barriers. Although food expenses are not covered directly by the CARB grant, it is a critical service to provide for anyone conducting community engagement activities. TransForm was not able to provide childcare during resident meetings due to insurance requirements, but it is a worthwhile expense to broaden participation, especially for evening and weekend meetings.

Our largest non-personnel expenses were the gift cards provided to residents who completed the survey and participated in focus groups or individual interviews. This was considered compensation for their time and contribution to the process, and resulted in a more open participatory process.

Table 8 - Non-Personnel Needs Assessment Costs

Expense	Total Cost
Translation	\$750
Printing	\$1,800
Food for meetings and focus groups	\$830
Gift cards for completing surveys	\$13,900
Gift cards for participating in focus groups or interviews	\$770
Total	\$18,050

Lessons Learned from Needs Assessment Process

Overall, conducting a needs assessment is an important first step for ensuring that planned transportation investments reflect the needs and interests of the community they are intended to serve. We received valuable insights on how to design the project to best serve residents. Additionally, engaging residents early in the process is important for building support and excitement for the upcoming mobility hubs.

Planning Phase

It is necessary to build trust with partner organizations and residents prior to beginning the needs assessment process. Our efforts included developing scopes of work and contract agreements that outlined the purpose of the pilot project, and recruiting Site Coordinators and SLTs. We also conducted site visits to understand the existing transportation landscape and challenges that ultimately helped frame the needs assessment survey. It is critical to budget time and staffing effort to build trust with community stakeholders prior to developing a needs assessment.

The budget for a needs assessment process should include sufficient funding for translation, printing, food, incentives, and staff time. These funds reduce the barriers to participation and increase the likelihood of a high survey response rate.

Survey Development

Collaborative survey development with communities is an iterative process and considerable time and resources should be dedicated to this phase. We strongly encourage organizations to tailor questions that best assess the unique transportation needs of their communities, but to also use existing transportation survey measures when possible. Having access to standardized transportation needs assessment questions (e.g., developed by CARB, an academic group, or another organization) would allow communities to design their surveys more quickly. Validated questions would also increase survey reliability and allow data to be compared across communities working on similar projects.

Presenting a draft version of the survey to residents helps ensure that the final materials are meaningful, engaging, and easy to use. It is vital to create a resident advisory group, similar to the Site Level Teams, to test survey drafts. The final survey was adjusted significantly due to feedback from residents. Revisions to the final survey included reducing the number of survey questions to avoid survey fatigue, revising questions that were confusing or that many residents did not complete correctly, and reordering the survey so that sensitive questions did not appear on the first page (e.g., household income).

Paper surveys require significantly more time and staff resources than electronic surveys, but were found to be the most suitable and accessible format for our audiences. Site Coordinators at all three sites indicated that paper surveys present the fewest barriers for completion and would yield a more representative sample of the residents. Further, ample staff time is necessary for in-person outreach, to review individual surveys for unclear answers, and to complete data entry.

Survey Outreach

In-person survey outreach allowed Community Surveyors and Site Coordinators to answer questions and address any concerns the residents shared about the survey or the mobility hubs project. Overall, the needs assessment process was well received by survey respondents and that is largely due to the level of engagement and in-person survey outreach. Many residents were concerned about providing sensitive information (e.g., household income or driver's license ownership). The cover page of the survey includes a disclaimer, which was confirmed in-person by the surveyor:

"All personally identifiable information will be kept confidential and you are welcome to skip questions you do not feel comfortable answering. No information you provide will be used against you, or used to jeopardize your housing."

Hiring and training residents for survey outreach and data entry creates opportunities for meaningful community engagement, including workforce development. Residents were able to actively contribute to the project while receiving compensation and training.

Simultaneous language interpretation with headsets is the preferred method for non-English speaking residents to participate during meetings. We initially tried consecutive interpretation, where the

speaker pauses to allow the interpreter to translate. Live interpretation allows the Spanish-speaking residents to participate more naturally, and is also easier for the English-speaking presenters.

In conclusion, the needs assessment was a valuable and informative process that highlighted key transportation needs and concerns for residents at each project site. The project team is confident that the mobility hubs will be more successful in meeting specific community needs and addressing gaps in clean transportation access as a result of this rigorous process and the valuable input we received from residents and community members.

Next Steps

After concluding the needs assessment process, the project team used the results to design a tailored implementation plan for the mobility hub at each site. The project team is moving forward with the goal of providing all of the mobility options mentioned in the survey, while prioritizing staff resources and budget for the mobility options that residents are most interested in: electric vehicle car sharing, Clipper cash, Lyft/Uber rides, and AC Transit EasyPasses (in Oakland only). Residents expressed less interest in bike sharing and e-scooter sharing, but also overwhelmingly reported unfamiliarity with these services. In response to this, the project team will move forward with providing these services, as this is an opportunity to build awareness of these new clean mobility options.

Although the project team now has clarity on which services to prioritize at each mobility hub, real-world limitations and complexities may not allow all of the services to be deployed at each site. These limitations will become more clear as the team moves into the implementation phase of the project.

The needs assessment data also provides a useful tool for informing future implementation and outreach activities, and the project team will utilize the processes that are now in place to engage residents and hear their insights. The barriers that residents shared in the needs assessment (e.g., not having access to a credit or debit card) will also inform future project activities. Residents are excited about the upcoming mobility hubs and we look forward to connecting these communities with more reliable, clean, accessible and affordable transportation options.