

“No One Should Feel Like They’re Unsafe”: Mobility Justice Photovoice as a Youth Advocacy  
Tool for Equitable Community Mobility

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**Abstract**

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*Objectives.* To examine personal and community mobility challenges and opportunities among youth of color, and identify ways to partner with youth to advance equitable community mobility. *Methods.* We conducted a community-based participatory research photovoice study using mobility justice principles from November 2020 to May 2021 with 10 youth of color from South Seattle, Washington. We conducted thematic content analysis of verbatim photovoice session transcripts. *Results.* Youth reported feeling vulnerable riding public transit alongside people experiencing mental health issues, while recognizing the dangers police can bring to communities of color. They identified specific infrastructure changes and free transit to facilitate safe, accessible transportation. They emphasized the importance of youth voice and intergenerational community discussions to inform city decision-making. We co-created an online forum centered on equitable mobility with youth to exchange ideas with their community and city leaders. *Conclusions.* City leaders and other policymakers should implement policy and infrastructure changes to enhance equitable mobility. They should incorporate youth and mobility justice principles in mobility and transportation decision-making processes, pay youth for their time, employ facilitators of color, and offer technology support.

## INTRODUCTION

Systemic racism fuels social determinants of health (SDOH), broadly affecting people of color's health.<sup>1</sup> SDOH are socially constructed systems that promote or constrain health and are connected to racial health disparities.<sup>2</sup> An often overlooked SDOH is access to mobility: being able to go from place to place to meet daily needs. Inequitable mobility hinders accessing healthcare, employment, education, exercise, and nutritious food, thereby affecting physical and mental health, relationships, and economic security.<sup>1,3-8</sup> Infrastructure and policies to improve mobility often advantage the privileged,<sup>1,3-8</sup> and policies like helmet laws<sup>9</sup> and transit enforcement<sup>10-12</sup> are disproportionately used against people of color. To achieve equitable mobility, people of color must be centered, guided by mobility justice principles. Mobility justice examines structural and intersectional barriers and solutions to advance freedom to move in public spaces and freedom from displacement.<sup>3,4,6,8</sup>

Low-income youth and youth of color face transportation inequities, particularly in active transportation (i.e., walking, biking, wheelchair travel, and public transit), that can decrease physical activity and negatively impact health.<sup>13-15</sup> In the United States, Hispanic, Black and low-to-middle socioeconomic status youth experience disproportionate rates of high body mass index.<sup>16</sup> Barriers to youth active transportation include distance, parental attitudes, perceptions of safety and racism, lack of personal or public transportation access, and other physical and social environmental factors.<sup>13-15,17-24</sup> Residential segregation that separates racial/ethnic groups within a geographic area creates health disparities and inequitable access to safe and quality sidewalks, bikeways, public transportation routes, green space, and other built environment amenities.<sup>1,13-15,25</sup> Youth deserve equitable access to mobility but are often overlooked in research and policymaking.

Community-based participatory research (CBPR) can be utilized to center youth perspectives to understand underlying barriers to youth mobility. CBPR is a collaborative approach that actively involves community members in all aspects of the research process.<sup>26</sup> Photovoice, a methodology often used in CBPR, centers community photography and storytelling to prioritize concerns and advocate for change.<sup>27,28</sup> Research on transportation and mobility inequities among youth are limited. Further, while the studies described above involved youth, only one was CBPR and focused on traffic-pedestrian safety and walkability to increase opportunities for active transportation.<sup>24</sup> None of the studies above used a mobility justice framework.

To address these gaps, we conducted a CBPR photovoice study guided by mobility justice principles to identify personal and community mobility challenges and opportunities among youth of color, and ways to partner with youth to advance equitable community mobility. Youth were from the Beacon Hill neighborhood, one of Seattle, Washington's most diverse yet increasingly gentrified neighborhoods. Nearly three-quarters of Beacon Hill residents self-identify as Asian (45.5%), Black (11.9%), Hispanic (9.6%), Mixed (5.1%), Native Hawaiian/Pacific Islander (0.4%), or American Indian/Alaska Native (0.1%); youth under 18 years old make up approximately 18.9% compared to 15% citywide.<sup>29</sup> Over one-quarter (27.1%) of residents in Beacon Hill and surrounding areas hold limited English proficiency, more than twice the county average.<sup>30</sup> The neighborhood is also considered a high-poverty area with 36.5% of residents living in or near poverty levels.<sup>30</sup> Beacon Hill is currently the focus of several Seattle

Department of Transportation (SDOT) mobility improvement projects.<sup>31</sup> Thus, situating this project in Beacon Hill was an optimal way to understand key mobility priorities among youth and translate findings into action. While the study will provide insights specific to Beacon Hill, we also aim to broadly inform transportation-related changes and youth community engagement.

## **METHODS**

The current photovoice project was part of a larger University of Washington CBPR, mixed methods research project: the Participatory Active Transportation for Health in South Seattle (PATHSS) Study, which aimed to identify mobility challenges and opportunities, and desired improvements to support equitable mobility in the Beacon Hill neighborhood.<sup>32</sup> Beacon Hill Safe Streets (BHSS) and Seattle Neighborhood Greenways (SNG), community-led groups focused on making neighborhoods safe and comfortable, served as community partners.<sup>33,34</sup> After review of all study materials and plans, the University of Washington Institutional Review Board of Human Subjects deemed this study (STUDY00011146) as not involving “human subjects” as defined by federal regulations.

### **Participant Recruitment**

Participants were recruited by a combination of snowball sampling, outreach to schools and community-based organizations, social media, and flyers in community spaces. Purposive and quota sampling was used to ensure a diverse sample with respect to age, identified gender, race and ethnicity, modes of transportation used, and relationship to Beacon Hill. Inclusion criteria were (1) age 13 to 18 years, and (2) living, working, going to school, using services or transporting through Beacon Hill. Because the methodology primarily involved taking photographs each week in Beacon Hill, participants were excluded if they planned to leave Beacon Hill for one week or longer during the duration of the study. Only three youth who reached out during recruitment were excluded due to planned extended time away from Beacon Hill (n=1), not being connected to Beacon Hill (n=1), and unclear commitment to study activities (n=1).

We screened youth for eligibility and among those eligible and interested, we reviewed study information and program commitments using an information statement. Verbal assent was obtained from the youth and they were asked to share the study information sheet with their parents or guardians. We conducted an interviewer-administered survey of basic demographic and health questions.

### **Data Collection**

Youth participated in six main photovoice 90-120-minute group sessions in November and December 2020. They were compensated \$15/hour for all activities. A secure audio/video-conferencing platform was used for all activities due to public health guidance during the COVID-19 pandemic. Group discussions were facilitated by the first and second authors, both identifying as people of color. Online sessions were audio recorded and subsequently transcribed verbatim.

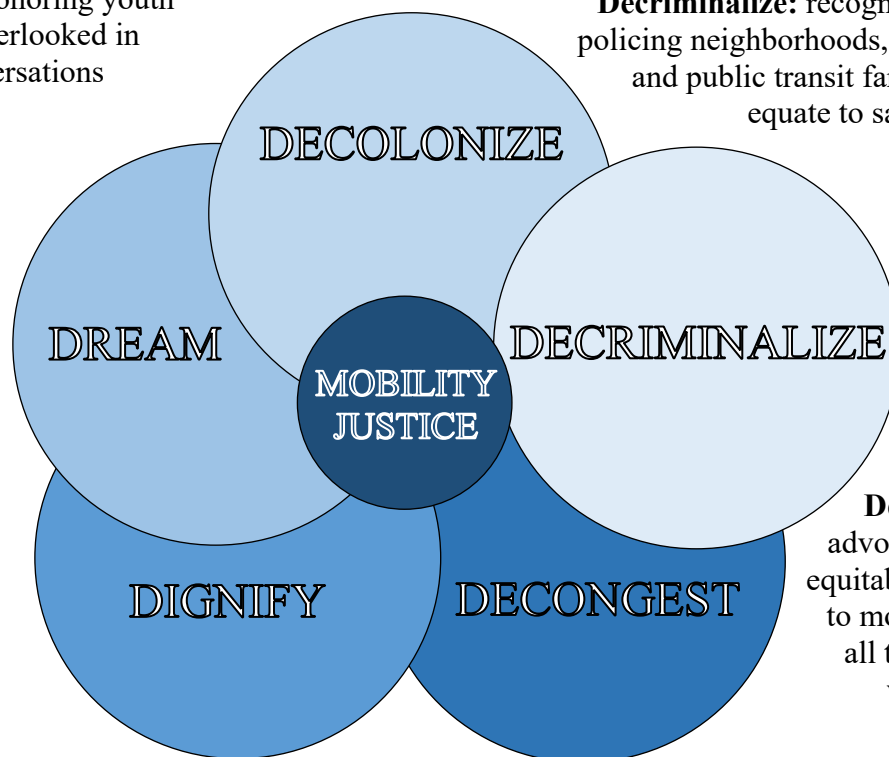
The first session covered study protocols, group agreements, photography ethics, and safety. Following the first session, youth shared their photographs to illuminate their lived experiences, guided by mobility justice-informed photography “missions”: (1) What are your general experiences of getting around Beacon Hill?; (2) What makes it difficult or hard to get around Beacon Hill?; (3) What makes you feel unsafe when moving around Beacon Hill?; (4) How do your different identities (e.g., race and ethnicity, gender, class, age, ability, etc.) affect the way you move through public spaces in Beacon Hill?; and (5) What do you love about getting around Beacon Hill? Youth determined mission number five as a group.

We categorized youth perceptions using the mobility justice framework: dignify, decriminalize, decongest, decolonize, and dream (Fig. 1).<sup>4,35</sup> *Dignify* centers the safety of historically marginalized communities and embraces their full leadership. *Decriminalize* acknowledges that bodies hold different identities that are subject to discrimination, state harassment, violence, and deportation, which limits freedom of movement. It also recognizes that policing is not the solution to safe streets. *Decongest* promotes mobility through access to transportation and streets that support wellbeing. *Decolonize* prioritizes the community and power sharing. *Dream* values the vision of underserved community members who are often excluded in decision-making processes.

**Decolonize:** honoring youth voice often overlooked in mobility conversations

**Decriminalize:** recognizing that policing neighborhoods, mobility, and public transit fares do not equate to safe streets

**Dream:** identifying solutions grounded in community knowledge as they are the experts



**Dignify:** centering the safety and protection of youth as they navigate their community

**Decongest:** advocating for equitable access to mobility for all to support wellbeing

**Fig. 1.** Adapted from the mobility justice conceptual framework model from *People for Mobility Justice*.

During the sessions, each youth briefly described at least one photograph and its relevance to the mission for the week, then one photograph was selected by the group to be the focus of the

discussion. For the selected photo, descriptions were guided by the **SHOWED** process (what do you **S**ee here?, what is **H**appening?, how does it relate to **O**ur lives?, **W**hy does this situation exist?, how can we **E**mpower/**E**ducate to address it, and what can we **D**o about it?).<sup>27,28</sup> The SHOWED process was completed for sessions two through four. However, this process was not utilized for the last two sessions in order to enhance group discussion. Instead, each youth shared their photographs and the group discussed how each photograph related to their own experiences.

*Dissemination planning.* Following the six main photovoice sessions, we had ongoing communication with the youth and met bimonthly in workgroups (i.e., audio/visual workgroup and youth panel workgroup) to co-create a dissemination and advocacy plan that included an online community forum. Youth provided input on outreach methods and structure for the forum. Workgroup meetings were one hour, paid, and scheduled during times that worked best for youth which was generally in the evening. Phone calls were offered to individuals who missed a meeting due to schedule conflicts. The community forum was held in May 2021 and offered live captioning and Spanish interpretation. The 73 attendees included community members, transportation and city officials, and media representatives. The event covered methods and goals of the PATHSS Study; an overview of mobility justice; youth photography and themes; mobility experiences and identified improvements from community leader and member interviews; and a youth video and panel. The short video was created by the audio/visual group and featured youth voice, writing, and footage that emphasized the importance of safety and their vision for equitable community mobility. The youth panel group shared the intersectionality of personal and community identities with mobility and voiced similar themes of safety and equity. (We received caregiver permission for the youth panelists to participate in this way.) The forum ended with facilitated breakout rooms for attendees to discuss reactions and next steps. We sent an anonymous survey following the event to assess satisfaction with the event, takeaways, and elicit suggestions for future dissemination efforts. Twenty-three attendees completed the survey.

## **Data Analysis**

We conducted thematic content analysis using inductive and deductive approaches guided by the mobility justice framework to analyze verbatim transcripts from the photovoice sessions. In the spirit of CBPR that emphasizes the importance of community member inclusion throughout the research process, an undergraduate research assistant and South Seattle resident was the second coder. The first and third authors read through the transcripts to become familiar with the content and independently identified themes using pencil-and-paper method. More nuanced and specific concepts emerged through careful analysis and constant within-group and across-group comparisons across participants. The coders organized data into themes and sub-themes to build an initial codebook. Codes were added or removed until a stable set of codes was reached. Each transcript was coded independently and the coders held regular meetings to arrive at consensus judgments through open dialogue. Consensus coding helped to circumvent researcher bias, capture data complexity, and avoid errors. The codebook was shared with the second author and one youth photovoice participant for feedback. Qualitative coding software ATLAS.ti (version 8.0) was used for further analysis. We synthesized the information from all of the sessions and presented major themes to the photovoice group six weeks following the last session for participant feedback and clarification.

## RESULTS

A total of 10 youth participated in the study, 7 females and 3 males aged 13-16 years old. Eight youth identified as Hispanic and 2 youth identified as mixed race (Filipino/white and Asian/Black). Before the COVID-19 pandemic, 6 youth traveled by bus, 2 by car, 1 by walking, and 1 by a combination of public transit, car, and walking as their primary mode of transportation. In the study, which took place during the pandemic, 7 youth traveled by car, 2 by walking, and 1 by light rail as their primary mode of transportation.

### Findings

Findings across the five domains of the mobility justice framework are presented below. The main themes were derived across the photovoice transcripts. Photographs and characteristic quotes are not exhaustive and were paired to illustrate themes even if they were not taken and stated by the same person.

#### Dignify and Decriminalize

*Safety.* Youth reported positive and negative community interactions as it relates to their identity in public spaces. They described feelings of vigilance and powerlessness in anticipation of oppressive actions and harms as youth (e.g., kidnapping, which was reported to be a prominent consideration in their mobility decision-making at night). Youth worried about being hit by cars due to distracted drivers, and the lack of public infrastructure like adequate street lighting (Fig. 2-4). Youth reported feeling vulnerable riding public transit alongside people experiencing mental health issues, while recognizing the dangers police can bring to communities of color (Fig. 5-6). They shared personal experiences of racism as immigrants or children of immigrants, navigating public spaces with family members who speak languages other than English (Fig. 7).

Youth recommended traveling with others as a possible form of protection against harm. In reflecting on how people can feel unrestricted comfort in public spaces with the identities they hold, one youth participant said, “I think our society has to change, not only transportation, but our society as a whole and then, like, understanding other humans.”



(Left to right: Fig. 2-4)

**Fig. 2.** "...by the time I, like, don't want to play [soccer] anymore, it's already dark. And I usually go home by myself and at times I don't want to take the bus because of, like, COVID. I just walk home. But you know I'm alone in the dark walking, there's no one around, you know. I just feel unsafe."

**Fig. 3.** "...cars don't see pedestrians like young people like us... they could get killed because you know drivers aren't paying attention sometimes. And I know, like, where I live... when the lights are out, it is so dark, like, you literally can't even see any houses..."

**Fig. 4.** "I know there's, like, some drivers who, like, are behind you and they're, like, really close behind you... for me that's, like, a lot of pressure. Like they're, like, pushing me to, like, to go faster."



(Left to right: Fig. 5-7)

**Fig. 5.** "...sometimes I noticed that... [people appearing under the influence of substances] and stuff, like, go near the bus stop or, like, hang really close by, and it honestly puts a lot of people on edge."

**Fig. 6.** "...I feel like there's always a fear [around police], especially like for POC (people of color) that something... *could* happen..."

**Fig. 7.** "...for our race as Hispanics, when we go to the store, if we speak our language, there's just people staring at us... like a disgusting look... it just feels very uncomfortable."

## Decongest

*Equitable access to mobility.* Youth defined mobility access to be fast, easy, free, and safe. They emphasized the need for transportation to be free of cost for all to support transportation access, especially for low-income communities (Fig. 8). Youth viewed public transportation as community spaces where everyone should feel safe, comfortable, and respected (Fig. 9). They reported the importance of access to various modes of transportation depending on their destination.

*Public infrastructure changes.* Youth recommended public infrastructure that would increase visibility of youth and other community members on the streets and therefore, increase perceptions of safety that include additional stop signs, blinking crosswalks, and street lighting. Youth highlighted the need for consistent and comprehensive infrastructure that promotes pleasantness and comfort to the public transit experience for people of all ages and abilities (Fig. 10). These include additional buses during peak hours; shelters, seating, and timetables at all bus stops; and phone applications that provide accurate real-time arrival information.



(Left to right: Fig. 8-10)

**Fig. 8.** “Well, I feel like the best way to define affordable would be free.”

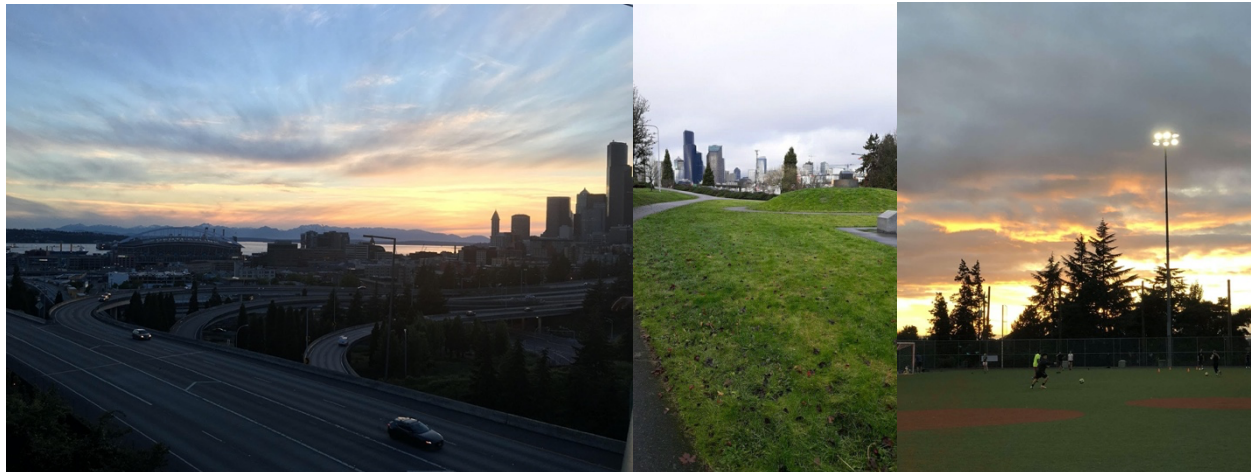
**Fig. 9.** “...the bus is, like, a public place. It’s, like, for everybody and, like, people should feel safe...”

**Fig. 10.** “I noticed, like, some bus stops don’t really have, like, benches or anywhere to sit... or at least have covers since it’s always raining here.”

## Decolonize and Dream

*Love for community.* Youth define their community as the spaces where they spend the majority of their time. They described assets of their community that include beautiful views of sunsets, spaces that provide opportunities for positive interactions like soccer fields and community centers, and encounters with familiar faces (Fig. 11-13). They shared the importance of childhood memories of their neighborhood and surrounding areas to their sense of place. Youth call for restorative services and mental health care for community members struggling with mental health and substance use, while discouraging police deployment. They identified free transit as a key policy solution to equitable mobility.

*Community awareness.* Youth identified the need for community-wide, intergenerational dialogue to build awareness around community safety. They emphasized the value of youth voice and the need for city leaders to take their opinions into serious consideration. Youth imagine a collective sense of community that welcomes and looks out for one another to encourage fearless and joyful movement.



(Left to right: Fig. 11-13)

**Fig. 11.** “...I always see this special view and so I always have to take a picture of it... it just brings some, like, happy vibe.”

**Fig. 12.** “...one thing I really love about the transportation...is that I get to see, like, amazing views like that.”

**Fig. 13.** “...I play soccer, right. And it's just like... I feel relieved. Every time I play, like, I put problems to the side. Just by playing soccer.”

## DISCUSSION

Several broad themes emerged focused on access, safety, identity, public infrastructure, and community connection that may be useful for policymakers in understanding youth mobility challenges and recommendations.

Youth identified free transit as a key policy solution. Cities across the United States aim to address climate change by increasing public transportation ridership and reduce vehicle use and air pollution.<sup>36</sup> Studies have shown that fare-free transit significantly increases ridership by 20-60% in just a few months.<sup>37</sup> Kansas City was the first major city to incrementally implement free public transit in December 2019.<sup>38,39</sup> In May 2021, the Los Angeles Metropolitan Transportation Authority unanimously voted for a sustainable financial plan for a pilot project proposal for students and low-income people to ride Metro trains and buses for free.<sup>40</sup> It will test the feasibility of permanently eliminating fares in an area where 70% of Metro’s ridership is low-income riders.<sup>40</sup> Given fare-free policy can advance transportation equity by increasing the mobility of low-income people who depend on public transit, it is critical to consider possible funding opportunities. The elimination of fare collection may cancel out the loss of revenue for smaller transit systems.<sup>37</sup> Kansas City has been able to fund free fares through the city budget, public-private partnerships, and federal funding.<sup>41,42</sup> Fare-free advocates in Seattle are pushing for larger employers to subsidize transit passes for their workers and for the city, county, and state to assist smaller employers without creating financial burdens.<sup>43</sup>

Concerns about fare-free public transit systems include the impacts of increased disruptive passengers that might negatively influence ridership. However, most managers of fare-free transit systems have not reported disruptive passengers as a significant problem compared to fare collection and fare disputes.<sup>37</sup> Some policy recommendations suggest working with local law enforcement and local courts for handling disruptive passengers.<sup>37</sup> However, proposals that include criminal legal systems must consider the role policing plays in maintaining structural inequalities between people of color and white people in the United States. Across the United States, police-based teams are being deployed to provide mental health crisis stabilization and psychiatric assessment.<sup>44</sup> More than one in five people fatally shot by police have mental illnesses,<sup>45</sup> and Black and American Indian/Alaska Native people are significantly more likely to be killed by police compared to white people.<sup>46</sup> Movements for equitable transportation, such as the National Campaign for Transit Justice, outlines policy recommendations that center vulnerable communities and highlights transit safety solutions beyond policing.<sup>47</sup> Indeed, though the youth in the present study acknowledged feeling vulnerable riding public transit with people experiencing mental health issues, they call for restorative services and mental health care, while discouraging police deployment. Seattle and other localities across the country should strongly consider implementing fare free transit and should ensure compassionate services are deployed in response to disruptive passengers.

Youth pointed to specific public infrastructure solutions to increase visibility and facilitate safe and comfortable mobility. Growing research reveals the effects of the built environment in individual and community health. Neighborhoods that are constructed to support physical activity report higher social capital and lower depression and alcohol abuse.<sup>48</sup> Factors that support physical activity and mobility include high-quality and well-lit sidewalks, connectivity between sidewalks and public transportation, destinations to walk, green space, attractiveness of surroundings, and perception of safety.<sup>13,15-24,48</sup> Additionally, opportunities for social interaction result in better mental health.<sup>47</sup> Because such infrastructure changes have the potential to promote more livable communities, more resources should be directed toward such investments.

Youth emphasized the value of their opinions in city decision-making. In a recent study conducted by the Seattle Department of Transportation (SDOT), the Beacon Hill community raised the need for SDOT and partners to better engage teenagers to gather their input.<sup>49</sup> Providing structured opportunities for youth engagement can address the social determinants of health especially when including a social action component.<sup>50</sup> The community forum we hosted provided a powerful opportunity for action in the neighborhood. Following the forum's youth panel, one youth panelist stated, "People are really hearing us here, and I want more people to hear us!" The youth report now being more deeply committed to advocating for mobility justice with their community. Nearly all (96%) forum attendee survey respondents reported learning about youth perspective as useful, with many commenting that they now plan to look to youth more often in their advocacy and policy-planning efforts. City leaders and other policymakers should incorporate youth into decision-making processes. We will continue to advance youth- and community-based recommendations by co-writing a policy brief, maintaining direct connection with city leaders, co-creating alternative community forum formats for broader community reach, and writing a larger grant for additional community-based participatory research.

## **Limitations**

This study was conducted during the COVID-19 pandemic and findings must be considered in light of transportation and mobility disruptions due to issuing stay at home orders. Public transportation experienced a major decline in ridership and primarily served low-income essential workers who depended on public transit, did not have remote work options, and are disproportionately people of color.<sup>38, 51</sup> The youth who participated in the photovoice reported primarily utilizing public transit for transportation before the pandemic, however, they relied on private vehicles during the pandemic due to safety concerns.

The majority of youth participants did not feel comfortable turning on their camera during photovoice discussion sessions, which may have impacted group cohesion and trust. Future work should consider the tradeoffs between holding sessions in-person and the convenience of being online. Outside of pandemic circumstances, it would be beneficial to ask youth for their preference and if responses vary, consider a hybrid approach.

The findings of this research are limited to youth who participated in the photovoice and are not generalizable, nor was this study intended to generalize. Rather, it was to learn about lived experience and ways to partner with youth to bring their wisdom to decision-makers. Relatedly, there were gaps in demographic representation of the community. Our recruitment efforts did not result in significant participation from Black and Asian American and Pacific Islander (AAPI) identifying youth despite making up a large portion of the population in Beacon Hill and the general South Seattle area. This gap is important to acknowledge as violence significantly impacts mobility for people of color. Black youth, both historically and currently, have been the targets of violence and mistreatment at the hands of institutions that are designed to serve or protect people. Beacon Hill is a historically AAPI neighborhood and the recent increase in violence targeting AAPI communities can cause safety concerns when leaving their homes. Future work should modify recruitment efforts to better reach Black and AAPI community members.

## **Conclusions**

For equitable engagement, city leaders and other policymakers should incorporate youth in mobility and transportation decision-making processes, pay them for their time, employ facilitators of color, and offer technology support. Policies developed in partnership with youth and derived from a mobility justice lens can advance equity and correct the deep and intersecting harms and health disparities caused by systemic racism, SDOH, and inequitable mobility.

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