



# New Mobility In-language Interviews Report

SDOT New Mobility Research | January 2021

## **SDOT PROJECT TEAM**

### **Project management**

Becky Edmonds

Margo Dawes

### **Manager**

Alex Pazuchanics

### **Reviewers**

Peggy Liao, OIRA

Joel Miller

Ben Rosenblatt

Kelly Rula

Mary Catherine Snyder

Amelia Wallace

## **PRR PROJECT TEAM**

### **Research**

Anne Frugé

Jordan Tuia

Kate Gunby

### **Community engagement**

Nancy Thai

Jacqueline Ramirez

Artie Nelson

Brett Houghton

### **Language services**

Abdullahi Jama

An Huynh

Daniel Ruiz

Eunji Hamnett

Farah Mohammed

Jacqui Morris

Jay Kang

Kaitlyn Hou

Lawrence Idos

Megan Harris

Yingwen Robinson

Yiran Huang

# TABLE OF CONTENTS

<b>INTRODUCTION.....</b>	<b>3</b>
PURPOSE.....	3
APPROACH.....	3
<b>METHODS .....</b>	<b>4</b>
OVERVIEW .....	4
DEVELOPING MATERIALS.....	4
RECRUITING PARTICIPANTS FROM MULTIPLE LANGUAGE COMMUNITIES .....	5
ANALYZING INTERVIEW DATA WITHIN AND ACROSS GROUPS.....	5
DEMOGRAPHIC PROFILE.....	6
<b>KEY FINDINGS.....</b>	<b>10</b>
<b>DETAILED FINDINGS.....</b>	<b>11</b>
TRIP PURPOSE AND COMPANIONS.....	11
TRAVEL MODES .....	12
TRIP ORIGINS AND DESTINATIONS .....	15
BARRIERS TO GETTING AROUND .....	16
<i>All travel modes.....</i>	16
<i>Personal vehicles.....</i>	18
<i>Public transit.....</i>	19
<i>Ridehail.....</i>	20
<i>Car share.....</i>	22
<i>Bike and scooter share.....</i>	22
SUGGESTED IMPROVEMENTS FOR NEW MOBILITY OPTIONS.....	23
COMMUNICATIONS CHANNELS .....	24
TRAVEL PATTERNS AND COVID-19.....	25
<b>RECOMMENDATIONS AND LESSONS LEARNED FOR EFFECTIVELY INCLUDING PEOPLE WHO USE LANGUAGES OTHER THAN ENGLISH IN RESEARCH EFFORTS .....</b>	<b>27</b>
OVERVIEW .....	27
BUILDING A STRONG TEAM .....	27
<i>Key recommendations for future studies .....</i>	28
<i>Successes from the New Mobility interviews.....</i>	29
<i>Lessons learned from the New Mobility interviews.....</i>	30
HIGH QUALITY IN-LANGUAGE MATERIALS .....	31
<i>Key recommendations for future studies .....</i>	31
<i>Successes.....</i>	32
OUTREACH AND RECRUITMENT.....	32
<i>Key recommendations for future studies .....</i>	32
<i>Successes from the New Mobility interviews.....</i>	35
<i>Lessons learned from the New Mobility interviews.....</i>	37
PROJECT IMPLEMENTATION, ANALYSIS, AND REPORTING.....	38
<i>Key recommendations for future studies .....</i>	38
<i>Successes from the New Mobility interviews.....</i>	39
<i>Lessons learned from the New Mobility interviews.....</i>	39



# INTRODUCTION

## Purpose

“New mobility” refers to emerging elements of our transportation system that are enabled by digital technology, shared, driven by real-time data, and often providing curbside-to-curb transportation. New mobility options allow Seattleites to treat urban transportation as a customizable, on-demand service. They can book and pay for different transportation services as they go, based on what they need.

As the transportation landscape shifts in Seattle, it is important for SDOT to understand how and why people use different mobility options. Getting a complete picture of who uses new mobility options such as Transportation Network Companies and shared cars, bikes, and scooters— and how, when, where, and why they use them—is important. This information will enable planners to help everyone move safely and efficiently throughout Seattle.

## Approach

SDOT hired PRR, an independent firm, to conduct research into this topic using a two-phase approach. In 2019, PRR surveyed residents of Seattle and the

surrounding region and recent or potential tourists in English. The research team conducted outreach to hear from people with disabilities, people of color, households with low incomes, and youth (13-17 years old). In 2020, PRR conducted in-depth interviews with people who speak languages other than English because these communities are often missed by the simple random sampling methods used for the 2019 survey and they were not prioritized in the 2019 survey outreach.<sup>1</sup> After consulting with our language services and diversity, equity, and inclusion teams, PRR recommended against directly translating the survey into languages other than English. Rather, PRR advised SDOT to conduct focus groups or interviews, which more effectively reach historically

## Research objectives

- Understand who uses new mobility options, and how, when, where, why, and how often they use these options.
- Understand incentives and barriers to using new mobility options.
- Learn user and non-user attitudes towards new mobility options and how they see these options fitting in among the many modes they can choose from to travel in Seattle.
- Learn user and non-user attitudes towards SDOT’s role in regulating new mobility options.
- Track the public’s behavior and attitudes over time.
- Learn about the above objectives specific to people who primarily use one of Seattle’s Tier 1 languages.
- Learn about the influence of COVID-19 on user and non-user travel choices.
- Learn about perceptions of public safety and disparities in people’s experience using new mobility options.

---

<sup>1</sup> SDOT originally planned to conduct focus groups in each Tier 1 language other than English but switched to interviews due to safety concerns related to COVID-19.

underserved and marginalized populations. SDOT originally planned to conduct focus groups in each Tier 1 language other than English but switched to interviews due to safety concerns related to COVID-19. PRR reached out to and interviewed people who use Cantonese, Korean, Mandarin, Somali, Tagalog, and Vietnamese. We define these languages as “Tier 1,” meaning at least 10,000 city residents speak each of these languages.<sup>2</sup>

This report summarizes findings from the interview research, including suggestions on how to make it easier for people to get around the city and recommendations on how SDOT can effectively engage these populations in future research efforts. The research team considered both what went well during this study and lessons learned along the way that can inform outreach for other projects. The appendices provide interview guides and recruitment materials in all languages to document the process used to conduct this research for support future efforts.

## METHODS

### Overview

In September and October 2020, PRR conducted eight interviews in each of Seattle’s Tier 1 languages other than English and Tagalog (48 total).<sup>3</sup>

We aimed to gather information from a diverse group of people within each language community to capture a range of perspectives in this study. Therefore, we considered additional factors when selecting people to invite for an interview, including: English proficiency, Seattle residency, transportation modes used in the last 30 days, living in a household with youth under the age of 18, employment status, disability status, and income.

We prioritized talking to Seattle residents, but we heard from 9 people who lived outside the city limits, an indication of the regional approach necessary to fully engage with transportation issues.

### Developing materials

PRR used transcreation to develop materials for this study. Transcreation is often thought of as “creative translation.” The goal behind transcreation is that a message resonates with the audience the same way it was made to resonate with the original audience, which means that, often times, the entire message and the concept can be changed or adapted so that it meets this purpose.

### Interview Languages

- Cantonese
- Korean
- Mandarin
- Spanish
- Somali
- Vietnamese

---

<sup>2</sup> For details, see the Office of Immigrant and Refugees Affairs website at <https://www.seattle.gov/iandrapaffairs/LA>

<sup>3</sup> We recruited members of the Filipinx community in Tagalog and English but only heard from one person interested in doing an interview with SDOT. See pages 36 for more information about successes and lessons learned from outreach to the Filipino community.

SDOT originally intended to conduct focus groups, but pivoted to individual phone interviews because of COVID-19. PRR convened the language services project team with the lead researcher for a workshop to develop a focus group moderator guide that worked well for all language communities in the study. After the pivot to interviews, the PRR adapted the moderator guide to interviews, working closely with the language services project team and SDOT on revisions.

Additionally, language specialists reached out to members of their respective communities to learn about their top concerns and priorities when traveling around Seattle. PRR used this information to include relevant questions in the interview guide and conduct thoughtful outreach in each community. After gathering input on preliminary questions and overall style and flow, PRR collaborated with SDOT to create the interview guide in English. PRR language services specialists<sup>4</sup> reviewed and translated the final interview guide into all seven languages.

In collaboration with SDOT, PRR also developed an online screener survey to identify potential interview participants. The screener survey asked about travel habits, use of new mobility options, basic demographic information<sup>5</sup> and contact information. Language services specialists provided input on the screener questions and translated the document. PRR research staff programmed the screener survey into an online survey platform.

## **Recruiting participants from multiple language communities**

The PRR language services team designed customized outreach plans for each language community. The team coordinated their approach and shared recommendations on effective tactics by email. Language specialists distributed the screener survey link through various outreach methods including posting materials at grocery stores and restaurants, through social media groups, word of mouth, connecting with community-based organizations, etc. They developed most of their own recruitment materials, including social media posts and emails. With input from SDOT, PRR designed a flyer to advertise about the screener survey and translated the flyer into all seven languages to use in outreach. Appendix C (pages 132-164) provides outreach plans and example recruitment materials for all interview groups.

PRR research staff monitored responses to the screener survey and selected participants for all seven interview groups based on criteria described on page 4. Language services specialists coordinated directly with people selected for an interview to schedule an interview time and identify the best platform for each interview. Language services specialists conducted interviews in their respective language by phone and other video and voice platforms then, provided notes in English of each interview to the research team.

## **Analyzing interview data within and across groups**

PRR research staff synthesized insights within and across interview groups based on the notes from the interviewers. These insights are summarized in this report (pages 10-25).

---

<sup>4</sup> PRR uses the position title language services specialists, but there is no industry standard for these position titles. The Seattle Department of Neighborhoods has similar positions in their Community Liaison program.

<sup>5</sup> Demographic information includes age, gender identify, race, ethnicity, languages spoken at home, and income.

PRR focused on key themes about:

- Trip details (e.g., purpose, origin, destination, and mode)
- Trip experience (e.g., what makes getting around Seattle, easy or hard, how to improve travel in Seattle, and the role language plays in someone's trip experience)
- Travel patterns before, during, and after the COVID-19 pandemic (March 2020-present)
- Perceptions and experience using new mobility options

## Demographic profile

	Cantonese (n = 8)	Korean (n = 8)	Mandarin (n = 8)	Somali (n = 8)	Spanish (n = 8)	Vietnamese (n = 8)	Total, n (%) (n = 48)
<b>Do you live within the Seattle City Limits?</b>							
No	0	2	2	1	2	2	9 (19%)
Yes	8	6	6	7	6	6	39 (81%)
<b>How old are you?</b>							
18-24	1	2	0	2	2	1	8 (17%)
25-34	4	3	4	1	2	1	15 (31%)
35-44	2	1	4	3	2	1	13 (27%)
45-54	0	0	0	1	0	1	2 (4%)
55-64	1	2	0	1	2	2	8 (17%)
65-74	0	0	0	0	0	2	2 (4%)
<b>How do you identify?</b>							
Female	6	4	3	4	3	5	25 (52%)
Male	2	4	5	4	5	3	23 (48%)
<b>Including yourself, how many people are in your household?</b>							
1	0	2	2	1	1	0	6 (13%)
2	2	2	1	2	2	2	44 (23%)
3	3	2	1	2	2	2	12 (25%)
4	1	1	4	0	1	2	9 (19%)
5	1	0	0	0	1	2	4 (8%)
6	1	0	0	0	1	0	2 (4%)
7	0	0	0	3	0	0	3 (6%)
7 or more	0	1	0	0	0	0	1 (2%)
<b>How many of the people in your household are under 18?</b>							
0	4	7	3	3	4	4	25 (53%)
1	1	1	0	1	1	2	6 (13%)
2	1	0	4	2	2	2	11 (23%)
3	1	0	0	0	0	0	1 (2%)
4	1	0	0	0	1	0	2 (4%)
5 or more	0	0	0	2	0	0	2 (4%)
<b>Which language(s) do you speak at home?</b>							
Cantonese	8	0	2	0	0	0	10 (21%)
Korean	0	8	0	0	0	0	8 (17%)
Mandarin	5	0	8	0	0	0	13 (27%)

	Cantonese (n = 8)	Korean (n =8)	Mandarin (n=8)	Somali (n = 8)	Spanish (n = 8)	Vietnamese (n = 8)	Total, n (%) (n = 48)
Somali	0	0	0	7	0	0	7 (15%)
Spanish	0	0	0	0	8	0	8 (17%)
Vietnamese	0	0	0	0	0	8	8 (17%)
English	1	6	2	5	3	1	18 (38%)

#### How well do you read English?

Not very well	3	2	2	2	2	3	14 (29%)
Somewhat well	2	2	3	3	1	1	12 (25%)
Very well	3	4	3	3	5	4	22 (46%)

#### How well do you understand spoken English?

Not very well	3	2	2	2	2	3	14 (29%)
Somewhat well	2	2	3	2	2	1	12 (25%)
Very well	3	4	3	4	4	4	22 (46%)

#### Are you of Hispanic, Latino/a/x, or Spanish origin?

No	8	8	8	8	0	8	4 (83%)
Yes	0	0	0	0	8	0	8 (17%)

#### How do you identify?

*Multiple responses allowed. Counts may add up to more than total number of participants.*

Asian or Asian American	8	8	8	0	0	8	32 (67%)
Black or African American	0	0	0	8	0	0	8 (17%)
Race(s) not listed here	0	0	0	0	7	0	7 (15%)
Native Hawaiian or Other Pacific Islander	0	0	0	0	1	0	1 (2%)
White	0	0	0	0	1	0	1 (2%)

#### Do you have any of the following?

*Multiple responses allowed. Counts may add up to more than total number of participants.*

I do not have any of the conditions above	8	7	8	4	8	6	41 (87%)
A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying	0	0	0	2	0	2	4 (8%)
Blindness or have serious difficulty seeing when wearing glasses	0	0	0	1	0	1	2 (4%)
Limited ability to care for yourself	0	0	0	2	0	0	2 (4%)
Physical, mental, or emotional condition that limits learning, remembering, or concentrating	0	1	0	0	0	0	1 (2%)

#### What is the highest level of education you have completed?



	Cantonese (n = 8)	Korean (n = 8)	Mandarin (n = 8)	Somali (n = 8)	Spanish (n = 8)	Vietnamese (n = 8)	Total, n (%) (n = 48)
11th grade or less	0	0	0	1	3	1	5 (11%)
12th grade/High school diploma/GED	2	2	1	3	0	1	9 (20%)
Some college or trade/vocational school	1	0	1	0	0	1	3 (7%)
College graduate	5	5	4	3	2	4	23 (50%)
Post graduate work or degree	0	1	2	0	2	1	6 (13%)
<b>What was your total household income in 2019 before taxes?</b>							
Less than \$10,000	1	0	1	1	2	1	6 (13%)
\$10,000 to \$14,999	1	0	2	2	1	0	6 (13%)
\$15,00 to \$24,999	2	0	1	0	1	1	5 (11%)
\$25,000 to \$34,999	1	0	0	3	0	1	5 (11%)
\$35,000 to \$49,999	0	3	0	0	1	1	5 (11%)
\$50,000 to \$74,999	2	2	1	0	2	0	7 (15%)
\$75,000 to \$99,999	0	0	0	1	0	1	2 (4%)
\$100,000 to \$149,999	1	1	0	0	1	1	4 (9%)
\$200,000 to \$250,000	0	0	2	0	0	0	2 (4%)
More than \$250,000	0	0	0	0	0	2	2 (4%)
Don't know	0	2	1	0	0	0	3 (6%)

**Which can you reliably use?**

*Multiple responses allowed. Counts may add up to more than total number of participants.*

A cell phone with Internet access	8	8	8	6	8	7	45 (94%)
A working car or motor vehicle that you or someone you know owns	5	7	7	3	7	6	35 (73%)
A computer or tablet with Internet access	7	1	8	1	4	4	25 (52%)
A working bike or e-bike	6	1	6	0	0	0	13 (27%)
A working scooter or e-scooter	2	1	4	0	0	1	8 (17%)

**What best describes your work status?**

Employed	4	4	3	5	5	4	25 (52%)
Unemployed or furloughed due to COVID-19	2	0	2	1	2	1	8 (17%)
Homemaker	3	2	1	0	1	0	7 (15%)
Essential worker during COVID-19	0	1	2	0	2	1	6 (13%)
Student	0	1	1	0	0	1	3 (6%)
Retired	0	0	0	1	0	2	3 (6%)
Other	0	1	0	1	0	0	2 (4%)

**Think about the recent trips you have made to or in Seattle. What was the usual purpose of those trips?**

*Multiple responses allowed. Counts may add up to more than total number of participants.*

	Cantonese (n = 8)	Korean (n = 8)	Mandarin (n = 8)	Somali (n = 8)	Spanish (n = 8)	Vietnamese (n = 8)	Total, n (%) (n = 48)
Travel for everyday life – shopping	6	7	7	4	5	6	35 (73%)
Commute to and from work	7	5	3	6	6	4	31 (65%)
Visiting friends or family	5	6	5	4	5	3	28 (58%)
Social/recreational activities	5	6	7	2	4	3	27 (56%)
Medical appointments	1	6	3	4	6	4	24 (50%)
Travel to airport	2	3	4	0	3	1	13 (27%)
Commute to and from school	1	2	3	1	0	1	8 (17%)
Other	0	2	1	0	0	1	4 (8%)

**Thinking about your recent trips in Seattle, which of the following have you used to get around Seattle?**

*Multiple responses allowed. Counts may add up to more than total number of participants.*

Take public transit	5	5	7	6	7	3	33 (69%)
Use a personal vehicle you or someone you know owns	4	6	7	3	4	5	29 (60%)
Use ridehail	3	6	5	2	6	2	24 (50%)
Walk or use a wheelchair or other mobility aid	1	1	3	0	1	0	6 (13%)
Ride a bicycle that you or someone you know owns	3	0	2	0	0	0	5 (10%)
Use car share	1	3	0	0	0	0	4 (8%)
Use bike share	0	2	0	0	1	0	3 (6%)
Other	0	0	1	0	0	1	2 (4%)

## KEY FINDINGS

- Participants lived, worked, shopped, and played across the city, but many participants spent their time within Seattle city limits.
  - Most did not exclusively spend their free time in high-density urban centers (e.g., downtown or University District).
  - Many trips had destinations in South Seattle, or southern parts of King County.
- Traditional transportation modes, such as personal vehicles and public transit, were the most common forms of travel across all interview groups.
  - Many participants used multiple modes to get where they needed to go and made travel mode decisions based on when, where, and why they traveled.
  - Participants who used personal vehicles said they used this option when they needed convenience, flexibility, peace of mind when traveling at night, or extra space for traveling with other people or belongings.
  - Participants also used personal vehicles when they knew their destination had available parking.
  - PRR interviewed many transit users, most of whom viewed transit favorably and described the bus system as convenient and affordable.
- A majority of respondents to the 2019 survey said they used a new mobility service in the last 12 months, representing a larger proportion of new mobility users compared to the pool of interview participants.
  - For both survey respondents and interview participants, ridehail was the most well-known and frequently used new mobility option.

## Recommendations

- Invest in programs that make new mobility options more widely available, affordable, and accessible to people with diverse needs.
- Continue to increase public awareness about new mobility options other than ridehail and how these options may be useful for different non-commute trips.
- Ensure new mobility services provide translations or other in-language support so people who prefer languages other than English can effectively use these options.
- Expand new mobility options and outreach efforts to build awareness about these services in South Seattle and southern parts of King County.
- Identify ways that new mobility options can help address the first and last mile problem and connect people to transit routes, especially at times when bus service operates less frequently or in areas where there are fewer routes available.
- Explore ways to ensure ready access to helmets and well-maintained bikes to encourage bike share adoption.

- Interview participants typically chose new mobility options when they faced limited options.
  - For example, participants tended to use ridehail services if they needed to travel at a time buses did not run or if they needed to travel to/from a transit stop.
  - Bike share also helped participants get to and from public transit (the first and last mile problem).
  - In contrast, trip time and parking logistics weighed heavily in survey respondents' decision-making about using new mobility as opposed to other travel modes in Seattle.
- In general, people experienced more challenges using transit or new mobility options than personal vehicles.
- Regardless of mode, people found it hard to get around when there were delays (e.g., traffic for personal vehicles, trip duration, or transfers for transit).
  - Transit-specific challenges included insufficient accessibility (e.g., stops that were far from their origin or destination locations) or vehicle cleanliness.
- New mobility options addressed some mobility gaps, but was no replacement for the affordability, availability, and flexibility offered by personal vehicles or transit.
  - Participants often said ridehail or car share was too expensive to use more often, and they expressed little interest in using bike share more often because it was less useful for their travel habits.
  - Respondents to the 2019 survey reported similar barriers, but in the pre-COVID-19 era, they pointed to personal safety more often whereas interview participants focused on safety from the virus.
- Participants with limited English proficiency faced additional challenges getting around, but especially using new mobility options (e.g., instructions on how to use new mobility options are not often available in languages participants with limited English proficiency use).
- COVID-19 has limited how often many, but not all, participants travel.
  - Most expected to return to their regular transportation routine after restrictions to protect public health lifted.
- The West Seattle Bridge closure was not top of mind for most participants.

## DETAILED FINDINGS

### Trip purpose and companions

- Participants across interview groups typically made trips related to work or shopping.
  - They tended to travel alone or with children, but some said they traveled with extended family or friends.

**Table 1. Trip purpose**

Question: think about the trip you make most often, what's the purpose of your trip?

**Legend**

Least (0 trips)  Most (8 trips)

	Work or school	Shopping or errand	Kids Activities	Recreation or exercise	Medical	Other
Cantonese	2	8	1	1	0	0
Korean	4	2	1	3	0	1
Mandarin	3	5	1	0	0	0
Somali	8	4	0	0	2	0
Spanish	5	4	0	0	2	2
Vietnamese	3	8	1	1	1	3

Note: Participants could select multiple responses or list multiple trips within each trip category.

## Travel modes

- In general, participants relied on personal vehicles or public transportation to get around Seattle.<sup>6</sup>
- The top choice for travel was personal vehicle, closely followed by bus.
  - More participants in the Somali interview group used light rail, compared to other groups.
  - Few participants said they walked or biked to get places.

“I don’t mind driving and actually it is the most convenient way to travel with my son around Seattle and anywhere in Washington state. However, I’d like to use Link light rail more once the expansion is done.”

- Korean interview group, female, 35-44, Asian or Asian American, unknown income

“Before COVID-19, public transportation was good. I used the ORCA card. The light rail is suited to my transportation needs. It’s safe, the price is reasonable, and it’s less hectic.”

- Somali interview group, male, 55-64, Black or African American, less than \$10k

- Participants were largely aware of ridehail, car share, and bike share, though did not use these options very often. Almost all participants had used ridehail in the past. The exception was the Somali interview group where only 1 person had used ridehail before.
  - More participants had used bike share than car share. On the whole, participants were not familiar with scooter share. Those aware of scooter share expressed

<sup>6</sup> Quotes from interview participants appear in grey call-out boxes throughout the report. Quotes were translated from original language, lightly edited for clarity, and then reviewed by the language access specialist who conducted the interview.



concerns such as whether there were license requirements and feeling unsafe having to share lanes with cars.

- More participants in the Cantonese, Korean, and Mandarin interview groups used new mobility options (albeit infrequently for the most part), compared to other interview groups.
- Two people from the Korean interview group listed a new mobility option as a primary form of transportation (ridehail for one person; car share or ridehail for the other).
- Another person from the Korean interview group listed car share as their main form of transportation in response to the safety concerns from COVID-19.
- Two participants from the Mandarin interview group had only used new mobility services in China, but others in the group used new mobility services in the United States.

“The Seattle bus system is so good and so convenient.”

- Mandarin interview group, female, 35-44, Asian or Asian American, \$200k to \$250k

“I go to work on bus routes 106 and 107 and come back on the same routes. Mass transit remains vital, especially for people with low incomes who have been priced out Seattle.”

- Somali interview group, male, 35-44, Black or African American, \$25k to \$34k

“It would affect me a lot if new mobility options were not available.”

- Spanish interview group, male, 55-64, Hispanic or Latino/a/x, \$10k to \$14k

“I used bike share on [University of Washington] campus or [to get to] nearby places like downtown Seattle.”

- Vietnamese interview group, female, 65-74, Asian or Asian American, \$25k to \$34k

“Many people don’t know about car share as an option for transportation. I’m from Burien and hadn’t seen these cars before, so I didn’t know what they were, or how the service works.”

- Spanish interview group, female, 18-24, Hispanic or Latino/a/x, \$15k to \$24k

“I like to use Uber or Lyft since I don’t have a driver license and it is just so convenient to use.”

- Korean interview group, female, 18-24, Asian or Asian American, unknown income

“‘New mobility’ is new terminology to me. I’ve never heard [that term] before, but I see that kind of transportation every day.”

- Somali interview group, male, 35-44, Black or African American, \$25k to \$34k

- Trip distance factored into some participants’ decisions about how to get around. A few said they walk for shorter distances and drive for longer distances.
  - One participant in the Spanish interview group mentioned that the West Seattle Bridge closure prompted him to take the bus if he left West Seattle.

“If I take a bus to work, it takes me 1.5 hours [to get there], but if I drive it only takes me 35 minutes. The transfer between buses takes a long time; it takes me 25 minutes.”

- Mandarin interview group, female, 35-44, Asian or Asian American, unknown income

“When I travel around downtown...[I] use a bike or scooter or bus. Car share or Uber is not an option because the traffic is bad.”

- Vietnamese interview group, female, 65-74, Asian or Asian American, \$25k to \$34k

“I think public transportation is the best way to travel around. I enjoy contributing to fewer personal cars on the street. It’s good for the environment by reducing gas consumption and exhaust pollution.”

- Vietnamese interview group, male, 65-74, Asian or Asian American, \$15k to \$24k

“I used to take buses and Uber or Lyft to go to places where there is no bus service.”

- Korean interview group, male, 25-34, Asian or Asian American, \$50k to \$74k

“I don’t care about the price to use Uber. I only care about the time.”

- Cantonese interview group, male, 35-44, Asian or Asian American, \$50k to \$74k

“I never use bike share because my skills are not good enough to ride in Seattle. I am scared. Also, [there are] too many hills and slopes in Seattle.”

- Cantonese interview group, female, 18-24, Asian or Asian American, \$100k to \$149k

“I use Uber when I need a ride to the airport or a medical check-up if it rains. I feel safe using it when the weather is not nice.”

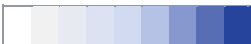
- Vietnamese interview group, female, 55-64, Asian or Asian American, more than \$250k

- When asked about the trip they make most often, participants across interview groups tended to use transit more than personal vehicles and used either of these modes far more than walking, biking, or any new mobility option.
  - Participants in the Mandarin, Somali, and Spanish interview groups traveled more by transit than personal vehicles.
  - The Korean and Vietnamese interview groups showed the opposite pattern, with more participants traveling by personal vehicle and fewer by transit.
  - Participants in the Cantonese interview group reported a similar number of trips by personal vehicles (6 trips) and transit (5 trips).

**Table 2. Mode choice for typical trips**

Question: think about the trip you make most often, how are you traveling?

**Legend**

Least (0 trips)  Most (9 trips)

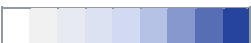
	Traditional			New mobility			
	Personal vehicle	Transit	Walk/ bike	Ride share	Car share	Bike share	Scooter share
Cantonese	6	5	0	1	0	0	0
Korean	6	0	2	1	1	0	0
Mandarin	2	8	2	1	0	0	0
Somali	4	9	1	0	0	0	0
Spanish	3	7	2	0	0	0	0
Vietnamese	7	2	0	0	0	0	0

Note: Participants could select multiple responses or list multiple trips within each trip category.

**Table 3. New mobility awareness and use**

Question: Have you have heard or used “new mobility” before?

**Legend**

Least (no participants)  Most (8 participants)

	Ride share		Car share		Bike share		Scooter share	
	Aware	Used	Aware	Used	Aware	Used	Aware	Used
Cantonese	8	7	5	1	8	1	4	1
Korean	8	8	8	6	8	8	7	1
Mandarin	8	8	8	4	8	4	8	0
Somali	7	1	7	1	7	0	7	0
Spanish	8	8	7	2	7	2	7	1
Vietnamese	8	7	7	0	7	3	1	0

### Trip origins and destinations

- Participants lived, worked, shopped, and played across the city, but a majority of participants spent their time within Seattle city limits.
- Almost all participants lived outside of downtown (e.g., West Seattle and Rainier Valley) and a few lived outside Seattle city limits (e.g., Shoreline and Renton).
  - Many participants from the Somali interview group lived in the southeast region of Seattle.
  - Many participants from the Vietnamese interview group lived in West Seattle or other parts of the southwest region of Seattle.

- More participants from the Korean and Mandarin interview groups lived in the northeast region of Seattle and in East King County (e.g., Kirkland and Bellevue).
- In general, participants described decentralized travel habits. Most did not exclusively spend their free time in high-density urban centers like downtown or University District.
  - Most trips began in residential neighborhoods outside downtown or in shopping hubs, like Chinatown or University Village, and ended in downtown, South Seattle, or southern parts of King County.
  - A handful of participants from the Mandarin interview group spent time in East King County (e.g., Bellevue, Mercer Island, and Kirkland).
  - A few participants from the Spanish interview groups spent time in Kent.
  - Very few participants described trips that crossed county lines, but those who did reported going to Everett or Lynnwood for recreational purposes.
  - Several participants, more commonly from the Vietnamese interview group, traveled from West Seattle to other parts of town. The West Seattle Bridge closure made it more difficult for these participants to move around the city.
    - For example, we heard from some participants that it was much more difficult to use a personal vehicle with the bridge closed and they were not comfortable using transit during COVID-19. This limited their mobility options in general.

## Barriers to getting around

### All travel modes

- In general, people experienced more challenges using transit or new mobility options than personal vehicles.
  - Transit-specific challenges included poor accessibility (e.g., stops that were far from their origin or destination locations) or insufficient cleanliness on board.
  - Affordability was a top barrier keeping participants from using new mobility more often.
  - Some said new mobility options were difficult to use because of their limited proficiency with English.
- Most participants said they had no need for new mobility options. Of the new mobility users interviewed, the top reasons for using these options related to school (e.g., ride share for the commute and bike share to get around campus) or for getting around late at night.

“[New mobility] would be helpful sometimes. For example, if my car needs maintenance or such.”

- Somali interview group, female, 18-24, Black or African American, unknown income

- Regardless of mode, people found it hard to get around when there were delays (e.g., traffic for personal vehicles, trip duration, or transfers for transit).

“Using multiple buses makes trips hard. If I miss the bus, I must wait another 30 minutes, and Seattle has rainy and cold weather during winter.”

- Somali interview group, male, 35-44, Black or African American, \$25k to \$34k

“Lots of times the bus doesn’t show up for a long time. A lot of times, I just use Uber or Lyft because I don’t want to deal with this frustration. I really hope this issue gets fixed.”

- Korean interview group, male, 25-34, Asian or Asian American, \$50k to \$74k

- Many used multiple travel modes to get around or they chose their mode based on the situation.
  - The few new mobility users interviewed used new mobility services for non-commute trips (e.g., when there was limited transit service—often at night, picking up groceries, getting to the bus stop, etc.).
  - The West Seattle Bridge closure impacted travel habits for participants who had relied on it before.
  - Participants in the Vietnamese interview group were more affected by the closure because of where they lived.
  - One person reported using car share daily for commuting to work.

“My head hurts so bad because of bad traffic from the West Seattle Bridge closure. It takes a long time to make the trip.”

- Vietnamese interview group, female, 55-64, Asian or Asian American, more than \$250k

- Many participants did not experience language-related travel barriers. However, participants with limited English proficiency faced challenges getting around in general (e.g., reading local road signs or highway exit signs) and using new mobility options in particular.
  - A handful of participants (one each in the Cantonese, Spanish, and Vietnamese interview groups) said they relied on translator/speech-to-text technology to help them get around Seattle.
  - One person in the Cantonese interview group said they are nervous to communicate with ridehail drivers or use ridehail apps.
  - Another person in the Cantonese interview group wrote destination addresses down to avoid miscommunications with the driver.

“I have no problem in English, but signs at the bus stops need to be translated in different languages, especially brochures at the bus stops so it is easy for passengers with limited English skills to know the exact arrival and departure times.”



- Somali interview group, male, 35-44, Black or African American, \$25k to \$34k

“An app in my primary language would make the trip better even though I am fluent in English.”

- Somali interview group, female, 25-34, Black or African American, \$75k to \$99k

“I only know a little English, so I don’t know how to use the apps and communicate with English speakers. Sometimes I try to use the translator to communicate with other people, but they usually don’t have time to wait for me. Every time I want to use my phone to translate, people are afraid when I hand my phone to them because of COVID-19.”

- Cantonese interview group, male, 35-44, Asian or Asian American, \$15k to \$24k

“I want to go to more places, but I give up because my English is not good. I don’t want to communicate in English.”

- Cantonese interview group, female, 25-34, Asian or Asian American, \$25k to \$34k

**Table 4. Language barriers to getting around**

Question: how does language affect your experience traveling in Seattle?

**Legend**

Least (no participants)  Most (8 participants)

	No difficulty	Some difficulty	Large difficulty
Cantonese	4	3	1
Korean	7	1	1
Mandarin	4	3	1
Somali	2	1	2
Spanish	4	2	2
Vietnamese	5	3	0

**Personal vehicles**

- People across interview groups identified similar advantages and drawbacks to using personal vehicles to get around.
  - Advantages included:
    - Fast
    - Convenient
    - Direct travel routes (no multi-mode trips or transfers)
    - Flexibility in travel locations and times
    - Safety (especially during COVID-19 or at night)
    - Ability to travel with others and items

- Good for longer distances
- Drawbacks included:
  - Traffic
  - Parking availability and cost
  - Poor infrastructure (e.g., complex road rules, construction, narrow roads, and lack of high occupancy vehicle (HOV) lanes)
  - Pollution (noted by only one person)
  - Cost to own and maintain

“I have always travelled by car for the most part, and I enjoy that best because I can travel on my own schedule.”

- Somali interview group, female, 18-24, Black or African American, unknown income

“It is too hard to get in and out of Seattle because there is traffic all the time and it takes a long time.”

- Mandarin interview group, male, 25-34, Asian or Asian American, \$50k to \$74k

## Public transit

- Most people used the bus system, but some also used light rail to get around.
  - One person in the Korean interview group used the water taxi.
  - More participants in the Somali interview group used light rail.
    - They pointed to similar advantages and drawbacks for light rail and buses.
- Across interview groups, people identified similar advantages and drawbacks to using transit to get around.
  - Advantages included:
    - Affordability
      - Several participants contrasted the greater affordability of public transit with the higher price of new mobility options.
      - A few stated that they relied on subsidized ORCA cards or income-based fares.
    - Convenience (e.g., not having to worry about parking, living near a bus stops, or avoiding traffic).
  - Drawbacks included:
    - Lack of direct routes
    - Limited service frequency or hours, including nights and weekends
    - Unpredictable schedules

- Lengthy distance to a stop or station
- Transfers
- Limited accessibility
  - One person mentioned seating on buses and a few described language barriers.
  - The language barrier came up less often in relation to public transit than new mobility services.

“Public transportation is not my choice for grocery shopping. When I shop, I shop for the whole family for a week. It’s a lot to carry on and off the bus.”

- Vietnamese interview group, male, 35-44, Asian or Asian American, more than \$250k

“Bus stops feel very unsafe and smell very bad. I don’t feel safe there at night.”

- Mandarin interview group, female, 35-44, Asian or Asian American, \$200k to \$250k

“Buses stop running too early on the weekend. Buses should run until 2 AM.”

- Mandarin interview group, male, 25-34, Asian or Asian American, \$50k to \$74k

“It would be much easier or more convenient to travel if we have smart systems like Korean public transportation. For example, a smart system of bus stops inside each bus on the wall. The sign would show the whole bus route and which stop the bus is approaching so it makes us feel comfortable figuring out where to get off or transfer instead of having to ask a bus driver in English.”

- Korean interview group, female, 55-64, Asian or Asian American, \$35k to \$49k

“There is only one bus, Route 75, going from where I work to my home [and] pretty much all the time the bus is overcrowded.”

- Mandarin interview group, male, 35-44, Asian or Asian American, \$10k to \$14k

## Ridehail

- Ridehail was the most commonly used new mobility option. Participants often described ridehail as an alternative to traditional transportation modes.
  - Advantages included:
    - Convenience.
      - Participants said both options were useful for specific scenarios (e.g., one-way trips, bad weather, and traveling with groups).
    - Available when other options are not, usually nights or weekends when buses run infrequently or not at all.
    - Safety at night or in certain parts of town, usually contrasted with transit.
    - Avoiding the cost and inconvenience of parking.
      - One participant said she would only use ridehail to avoid parking but noted she does not have this problem when she travels south.

- Many participants' destinations were in South Seattle or southern King County, where parking is easier to find and cheaper or free.
  - Ridehail apps that previewed price and allowed advance reservations.
    - Two people in the Spanish interview group said the apps were useful for non-English speakers.
  - Avoid costs to own and maintain a personal vehicle (e.g., car insurance and repairs).
  - Groups can travel together (e.g., tourist activities and family outings).
  - Storage availability (e.g., especially important for shopping or running errands).
- Drawbacks included:
  - Affordability (the most significant barrier).
    - A few participants contrasted higher ridehail prices with the lower cost of bus fares.
    - Some participants considered ridehail affordable for short distance trips when other options were less available.
    - One person in the Korean interview group said they used ridehail until we introduced a new fee on these services<sup>7</sup>.

“I wonder if drivers clean or sanitize the car after each ride.”  
 - Vietnamese interview group, female, 65-74, Asian or Asian American, \$25k to \$34k

“I like Uber because I can request it through my phone, and I don't need to speak to a live person. I don't speak English, so it would be difficult if I had to request the service through a live person.”  
 - Spanish interview group, female, 35-44, White and Hispanic or Latino/a/x, less than \$10k

“A lot of people don't know that new mobility options are safe to use. Considering that many people, especially from Latin America, come from countries where they won't even get into a taxi, a stranger's car, they may be hesitant to use these services.”  
 - Spanish interview group, male, 35-44, Hispanic or Latino/a/x, \$100k to \$149k

“I have two kids, and they all need to sit in a car seat. Uber doesn't have a car seat for us to use.”  
 - Cantonese interview group, female, 55-64, Asian or Asian American, \$10k to \$14k

“The price of an Uber is fair. My trips usually cost less than \$35.”

---

<sup>7</sup> The Seattle City Council passed legislation in November 2019 that established a minimum wage for ridehail drivers and raised an existing tax on ridehail services by 51 cents (for a total of 75 cents per ride). The tax helps pay for city programs.

- Cantonese interview group, female, 25-34, Asian or Asian American, \$50k to \$74k

## Car share

- Only a few participants had used car share, but this option had many of the same advantages and drawbacks as ridehail.
  - Advantages included:
    - Convenience.
      - Participants said car share was useful for specific scenarios (e.g., long trips, bad weather, and traveling with groups).
    - Safety at night or in certain parts of town, usually contrasted with transit.
    - Avoid costs to own and maintain a personal vehicle (e.g., car insurance and repairs).
    - Groups can travel together (e.g., tourist activities and family outings).
    - Storage availability (e.g., especially important for shopping or running errands).
  - Drawbacks included:
    - Affordability.
    - Liability to maintain car share vehicles in good condition.
    - Not as easy to use car share as other new mobility options.

## Bike and scooter share

- Few participants used bike share and only three had used scooter share before.
  - Advantages included:
    - Nice for short distances, especially for the last mile to their destination (bike share more than scooter)
    - Fun
    - Good for the environment
    - Easy to access
    - Avoid costs to own and maintain a personal vehicle (e.g., car insurance and repairs)
  - Drawbacks included:
    - Poor maintenance
    - Poor cleanliness
    - Lack of helmets



- Not convenient for most of their trips
- Requiring riding license for scooter share
- Not as easy to use as other new mobility options
  - This concern was more prominent among older participants regarding bike share.

“I have heard about bike share, but I don’t think I would ever use it for my trips because of my age and the geography of Seattle is hilly. Also, I can’t cycle far (to Renton from West Seattle).”  
 - Vietnamese interview group, female, 55-64, Asian or Asian American, more than \$250k

“I’m glad scooter share and bike share exist because it means the city is thinking about our environment and climate change.”  
 - Spanish interview group, male, 18-24, Hispanic or Latino/a/x, less than \$10k

“I used bike share before and think it is convenient since I can park anywhere, and it can be exercise. But I don’t think I will use it more since there are more convenient ways to travel around Seattle, such as Uber or buses, where I don’t need to physically do something.”  
 - Korean interview group, female, 18-24, Asian or Asian American, unknown income

“I will not use bike share during COVID-19 because you don’t know who has used the bike before you, and you need to clean it up by yourself before you use it.”  
 - Cantonese interview group, female, 25-34, Asian or Asian American, \$50k to \$74k

“I feel very unsafe riding a bike in the Seattle area. The route and road conditions are not suitable for people to ride bikes. I don’t have any interest in trying scooter share because of the weather in Seattle. I think scooter share is only good for a tourist area.”  
 - Cantonese interview group, female, 25-34, Asian or Asian American, less than \$10k

## Suggested improvements for new mobility options

- Affordability was a top priority among participants, and a few specifically asked for subsidies or programs for people with low incomes.
- Participants wanted new mobility services to accommodate diverse customer needs and experiences. Suggestions included:
  - More translation and in-language services (especially for Mandarin and Spanish speakers).
  - Accommodations for families, such as child seats.
  - Ability to select ridehail driver gender.
  - Steps to reduce racism.
    - Some participants in the Mandarin group perceived a racial bias from ridehail drivers.
  - Outreach that increased awareness of:
    - The various new mobility options.

- Service availability and where to access the different options.
- How to use the different services.
- Costs associated with different options.
- Infrastructure improvements that make it safer to use bike and scooters share.
- Greater bike availability.
- Improvements making it easier to travel with personal items using bike share.

“I see a lot of young people on bikes, but not older men or women or people who are heavier or people with disabilities. They should design new mobility options with these people in mind as well.”

- Spanish interview group, male, 55-64, Hispanic or Latino/a/x, \$35k to \$49k

“It would be great if there were designated parking spots for ridehail around popular areas in Seattle like there are at the airport. I believe the designated ridehail parking spots would help ease traffic and make other drivers feel safe and comfortable travelling around the city. I’ve seen bikes parked anywhere and it makes the city look so ugly. It would be great if there were more designated parking areas for bike share bikes, like maybe every two blocks or streets in most popular areas.”

- Korean interview group, male, 55-64, Asian or Asian American, \$35k to \$49k

“I hope the City of Seattle offers more e-bikes around the city, like available every two to three blocks or something. Also, the maintenance on the bikes should be better. I’ve seen many damaged e-bikes and I’m concerned about riders’ safety.”

- Korean interview group, male, 25-34, Asian or Asian American, \$100k to \$149k

“Using Uber or Lyft can be pricey for families with low incomes, especially when people would like to avoid taking public transportation and would probably prefer ridehail options if they could afford them. If the City of Seattle offers some sort of financial support for families with low income to use those services, it would be so generous and take care of them.”

- Korean interview group, male, 25-34, Asian or Asian American, \$50k to \$74k

## Communications channels

- Across interview groups, participants relied on news (e.g., print, TV, radio, and online) and social media (e.g., Facebook, Twitter, and YouTube) for information.
  - Participants in many interview groups also received information from government agencies (e.g., King County Metro or SDOT), internet sources (e.g., Google searches), word of mouth, or community-based organizations.
  - Few participants mentioned receiving information from print materials or other institutions (e.g., work, school, or medical networks)

**Table 5. Communications channels**

<b>Sources, group 1</b>						
	<b>News</b>	<b>Social media</b>	<b>Internet</b>	<b>Government</b>	<b>Email</b>	
Cantonese	Y	Y	Y	Y	Y	Y
Korean	Y	Y	Y	Y	N	N
Mandarin	Y	Y	N	Y	Y	N
Somali	Y	Y	N	N	Y	Y
Spanish	Y	Y	Y	Y	Y	N
Vietnamese	Y	Y	Y	Y	Y	N

<b>Sources, group 2</b>						
	<b>Word of mouth</b>	<b>Transit stops</b>	<b>Community-based organizations</b>	<b>Print materials</b>	<b>Work or school</b>	<b>Medical institutions</b>
Cantonese	Y	Y	Y	N	N	N
Korean	Y	N	N	N	Y	N
Mandarin	Y	Y	Y	Y	N	N
Somali	Y	Y	Y	Y	N	N
Spanish	N	N	Y	N	Y	Y

Note: Participants could select multiple responses or list multiple sources within each category.

“Mailed pamphlets are not environmentally friendly, but they are the most efficient way to reach people because old people are not familiar with technology.”  
 - Mandarin interview group, male, 35-44, Asian or Asian American, \$200k to \$250k

## Travel patterns and COVID-19

- In general, participants traveled less frequently during COVID-19.
  - The Somali and Spanish interview groups were the exceptions.
    - These participants reported they had not significantly changed their travel habits during the pandemic; most of them still used transit.
    - However, many expressed concerns over the risk of commuting by transit during COVID.
  - Participants in the Korean interview group had not changed their travel frequency, but COVID-19 did affect their mode choice.
    - They traveled using personal vehicles more and transit less than they had before the pandemic.
  - Most participants expected to return to their regular travel habits after COVID-19 (i.e., most expected to travel more frequently by personal vehicle and transit than they currently do).

- Participants very rarely used new mobility options, and COVID-19 was another barrier to changing that behavior.

“I have not seen any changes in my travel habits. Before COVID-19, every transit operation was normal. Even after COVID-19, I am not worried about taking the bus.”

- Somali interview group, male, 35-44, Black or African American, \$25k to \$34k

“Since COVID started, we don’t take the bus anymore. Once COVID is gone or there is a vaccine available, we will still wait about two months just to make sure everything is right before we can go back to our old traveling habits.”

- Mandarin interview group, male, 35-44, Asian or Asian American, \$10k to \$14k

“Since the pandemic started, I haven’t taken any public transportation. Free rides are not that encouraging since lots of people on the bus are not wearing face masks and it’s hard to socially distance. Also, I try to avoid being in small, enclosed spaces with random people.”

- Korean interview group, male, 25-34, Asian or Asian American, \$100k to \$149k

# RECOMMENDATIONS AND LESSONS LEARNED FOR EFFECTIVELY INCLUDING PEOPLE WHO USE LANGUAGES OTHER THAN ENGLISH IN RESEARCH EFFORTS

## Overview

The 2019 survey was only available online and was only in English. The survey sample under-represented people who are Black, Indigenous, people of color, or who use languages other than English.

In 2020, SDOT made additional effort to reach people who use Seattle's non-English Tier 1 languages: Chinese (written traditional and simplified, spoken Cantonese and Mandarin), Korean, Somali, Spanish, Tagalog, and Vietnamese. SDOT hired PRR to plan and conduct additional research in those languages, specifically implementing community outreach and research design.

This effort did not entirely close the gap for participation by historically under-represented groups in the new mobility research. Specifically, the interviews did not effectively reach people who are Black, Indigenous, and people of color who use English as their primary language. They focused on and addressed one significant limitation of the 2019 survey, that it was only available in English, and laid groundwork for SDOT to reach diverse communities more effectively in the future.

Conducting outreach and interviews in priority languages is just one step towards inclusive engagement. Additional research is needed to shed light on the experiences of groups who are under-represented in this research, including people who are Black, Indigenous, people of color who use English as their primary language, people with disabilities, people with low incomes, people who rent, and people with limited access to technology. To further Seattle's commitment to racial and social justice, we recommend continuing to invest in research projects with similar emphasis on other historically underrepresented groups.

We identified four areas we believe are important to focus on in future efforts:

1. Building a strong team
2. High quality in-language materials
3. Outreach and recruitment
4. Project implementation, analysis, and reporting

## Building a strong team

The successes of this research project depended on having a strong team. The project team included researchers, community engagement professionals, and language services specialists who collaborated to bring their strengths, insights, and creativity to design a process to hear about new mobility service experiences from people who use Seattle's Tier 1 languages.

PRR included language services specialists on our project team, two specialists for each Tier 1 language. The language services specialists are local experts from their communities who advised the project team on engaging with their communities. They provided guidance in designing research



materials, developed outreach plans tailored to their communities, conducted interviews in their respective language, provided annotated notes in English summarizing the conversations, and reviewed analysis and reporting carried out by the research team to ensure an accurate representation of what community members expressed.

By investing time and resources to include local language specialists in the project team, SDOT was able to engage members of priority groups in the Tier 1 languages in the research. Partnering with members of the priority groups in planning, implementing, and analyzing the research helps ensure the data collected reflect the communities from which the data was collected, supporting organizations to create more equitable public policies, administrative procedures, and services for the communities they serve.

### **Key recommendations for future studies**

- To ensure a strong team for future efforts, we recommend that project managers:
  - Bring a diversity, equity, and inclusion perspective, centering specific priority groups and including those voices in every stage of project development and implementation.
  - Include language services specialists as core team members.
  - Onboard language services staff to the project at the beginning so they have context and can inform the process from the outset, including planning.
  - Collaborate with the entire team throughout the process, including building time into the schedule to solicit and incorporate feedback from a range of team members who bring different perspectives on the work.
- Partner with language services specialists
  - Advising on the research instrument(s) and its design.
  - Developing outreach plans tailored to their community.
  - Developing materials that are accessible and culturally relevant to priority audiences.
  - Pre-testing research instruments to ensure they work well for priority audiences.
  - Summarizing research findings to accurately represent behaviors, attitudes, and preferences of priority audiences.
  - Documenting recommendations and lessons learned to ensure continuous learning and improvement within the organization.
- Support the language services specialists throughout the process and facilitate knowledge-sharing as much as possible.
  - Identify one person on the project team to coordinate the work of the language services team, referred to in this report as the language services coordinator. This person will be the main point of contact for team members, answer questions, problem solve, and provide any support needed. This person will liaise with the project manager and keep a big picture view of the language services team effort, surfacing and elevating concerns, and keeping the entire project team apprised of

what the language services team is learning. We recommend this be a person who is multilingual themselves.

- Convene all the language services team members at key project milestones so they can share successes and learn from each other. This has the added benefit of relationship and team building.
- Provide templates, tips, and resources so the team can focus their efforts in their areas of expertise and provide information in an organized format for the research lead and the project manager. These might include templates for outreach plans and interview notes, tips for how to draw people out in interviews, and resources from other projects.
- Document and track materials for the final report such as outreach materials (including screenshots of social media posts or emails) and plans, translated surveys, interview guides, and interview notes.
- Combine communication channels that work best for the project manager with those that work best for individual team members. For one-on-one contact with team members, connect through their preferred channels of communication (e.g., email, phone call, and/or text). Provide team members clarity from the beginning of the project how group communication will happen (e.g., team meetings and/or group emails).

### **Successes from the New Mobility interviews**

- PRR engaged representatives from the Seattle Office of Immigrant and Refugee Affairs to review key research instruments including the screener survey and interview guide.
- We held a kickoff meeting with the whole team, including every language service specialist, at the start of the project to explain goals, objectives, and approach. Some team members attended in person and some joined through video conferencing. The whole team met one another face-to-face to get a sense of who they would be working with throughout the project. This was especially helpful as all work moved into the digital space due to COVID-19.
- Our research lead and language services coordinator collaborated with the language services and community engagement team members throughout the project lifecycle. The regular communication helped us quickly support individual language services specialists if they faced a challenge or pivot engagement methods to more effectively meet the community where they were.
  - We had regular check-ins with team members to talk through the work assignment and answer their questions. We checked in by email with some team members, but others preferred a phone call.
  - The language services specialists shared tips and tools with one another as they began interviews. The language services coordinator shared tools across the team that language services specialists were using to record their interviews. Regular communication with the language services specialists and fostering a culture of knowledge-sharing helped the team lean on one another to problem solve and share lessons learned together.

- One language services specialist interviewed a participant who did not want their gift card emailed to them and did not feel comfortable having their gift card mailed to their home as their mailbox is not in a secure location. The language services coordinator asked the whole team and PRR community engagement practitioners not working on the project for their recommendations or ideas for alternatives to send the interview participant their gift card. Together, we were able to quickly find a solution to get the interview participant their gift card: mailing the gift card to an address of the participant's choosing.
- Before the interviews began, we met one-on-one with each primary specialist conducting interviews to review interview techniques and best practices, documentation requirements including notes and recording, and platforms they might use to conduct and record the interviews.
  - These check-ins provide an opportunity to review goals, ask any questions, and discuss the interview process together. We asked each interviewer to send in a sample audio recording to test recording the interviews before interviewing a community member. This served the purpose of testing the technology before an interview and ensured the research team could access the media format of the interview recording. We also asked each interviewer to send us their first set of interview notes for us to review and provide feedback they could incorporate into subsequent notes.
- We reviewed interview notes and other materials from the language services specialists as we received them, providing feedback and asking questions to understand the content and learn where our ideas about "good" deliverables may have cultural bias.
  - The first language services specialists to complete an interview provided an interview notes structure that was very well organized. We shared the template with the other language services specialists to provide an example of what helped the research team quickly understand the interview notes.

### **Lessons learned from the New Mobility interviews**

- PRR found ourselves with tight timelines a few times in the project that compromised our collaboration. To address this, we suggest building time into the schedule and resources into the budget to allow for collaboration across a large team on major deliverables. We suggest at least 50 percent more hours than an English-only, research-only project of comparable survey length. This buffer can help to accommodate for the unknown elements that arise when working across languages and cultures. This extra time ensures every team member can contribute their expertise and the project management team has time to reflect on their own cultural bias and incorporate team feedback.
- As much as possible, provide templates and resources to the project team to use in advance. We initially did not provide an interview notes template for the interviewers. Because of this, we saw a wide variety of first interview notes from interviewers and had to ask for some additional information. Providing an interview notes template provided the interviewers a starting point for their notes and ensured the interviewers captured information that was important to the research team for the analysis.

- It was also helpful to provide several options for language services specialists to send large files, including audio files (e.g., OneDrive or Google Drive).
- As much as possible, share what the research and outreach teams need to document and save throughout the process, so materials are ready to include in the final report.
  - The research lead wanted to asked language services specialists to provide documentation of their actual outreach complete and examples of the outreach materials they used (e.g., screenshots of social media posts, pictures of onsite flyer posts, or emails to organizations) to use in the final report. It would have been helpful for the language services specialists to know at the beginning of the project this information would be included in the final report so they could keep updated records throughout the outreach process rather than update and compile materials after outreach occurred.
- It is best practice to be clear at the beginning what materials will be shared outside the project team and with whom so the people producing the materials are aware.

## High quality in-language materials

To effectively engage with communities who use languages other than English, we believe it is important to provide materials in every language that match the quality and refinement we bring to our English language materials. This requires having professionals who understand localization, translation, and transcreation and when to use each one.

**Localization** is adapting a text so that it is suitable for a specific market or "locale" by using local formats such as dates, addresses, currencies and units of measure as well as adapting it with culturally appropriate language. The idea is that the text sounds as if it were originally written in-language and not translated from English. Localization is sometimes used with software, websites and games where elements such as color, graphics and images are localized for a specific market.

Translation, the conversion of communication from one language to another in written form, includes following grammar and punctuation rules. It also includes changing the syntax of the message so that it sounds more natural in the target language. This is sometimes seen as part of localization, but it is just part of translation.

**Transcreation** takes adaptation to a different level. It is often thought of as "creative translation." The goal behind transcreation is that a message resonates with the audience the same way it was made to resonate with the original audience which means that, often times, the entire message and the concept can be changed or adapted so that it meets this purpose.

Both of these processes involve adapting content for a specific market and, depending on the project, they can be used independently or together. For example, if a message is transcreated, the process would also involve making sure that the elements, such as date formats, are localized.

## Key recommendations for future studies

- Partner early with language services specialists to transcreate study materials, including a screener survey, interview guide, outreach plan, and recruitment materials, including flyers and social media posts.

- Translate all materials, including the digital gift card message recipients see.
  - The more in-language content participants see throughout the process, the more they can see the organization’s effort to engage with them and relax and believe their voice is important and valued.

## Successes

- PRR assigned two specialists per language, one in a “primary” role and one in a “secondary” role.
  - The roles depended on the respective staff member’s strengths such that some teams comprised of one specialist in the primary role for outreach and the other person took on the primary role for interviews.
- We built in time for thoughtful review and quality assurance/quality control (QA/QC).
  - One team member did most of the materials development and translation and the other did most of the review. Where the final materials were in a different format (e.g., the programmed screener survey and the flyer) the primary specialist did a final QA/QC. Many of the primary specialists were responsible for translating materials and conducting the interviews and providing interview notes. The secondary specialists thoroughly reviewed the translated materials before they were used in the community.

## Outreach and recruitment

Creating a survey instrument in-language and investing in a quality team will not achieve real research results without effective high-quality outreach and recruitment designed to reach the priority audiences. Our language services specialists developed unique recruitment plans for their communities. The language services coordinator reviewed them to ensure they included general best practices and to make sure she understood them.

The initial outreach approach assumed focus groups in every language. Then, the project team faced the unforeseen challenges of the consequences of COVID-19. The team was able to reassess and find new paths forward, shifting to interviews instead of focus groups and identifying new recruitment tactics that addressed the conditions and new approach.

## Key recommendations for future studies

- Do not wait until you are ready to recruit study participants to engage the community. Get community input early in the process to ensure the research materials and approach suit each community’s needs and priorities. Then, share what you learn with participants and, if possible, the wider community to demonstrate you value their input and want to elevate their voices. This builds more effective research approaches, a foundation for trust between the community and the agency, and buy-in for the research project.
- Let language services specialists and the outreach team lead the effort to create tailored outreach plans to reach community members from each language.
  - Language services specialists created tailored outreach plans increasing the likelihood we engage community members in a meaningful way. These thoughtful

engagement efforts demonstrate to the community that SDOT is putting in the work to meet the community where they are and is invested in hearing from them. This can begin to build more trust in SDOT within the community and may lead to gathering more feedback and data from the community in the future to help SDOT better serve the community.

- Encourage language service specialists and the outreach team to collaborate on their respective plans so they can build on each other's thoughts.
- Have the research team identify priorities for recruitment and analyze demographic factors of people who expressed interest in participating in the research. This helps ensure we have a balance of hearing from a variety of different people.
  - The research team's analysis of these demographic factors can inform decisions about who from the pool of potential participants to invite to participate in the research.
- Create in-language digital and print outreach materials, including flyers, to use in outreach. If you want to reach people who use a specific language, they should see materials in their preferred language.
- Provide flexibility to language services specialists in how they conduct interviews (e.g., conducting interviews over the phone or a video platform). Furthermore, consider data collection through a variety of platforms such as interviews by phone or video chat or surveys online, on paper, or by call-in phone.
- Make it as easy as possible for people who are interested in participating to participate and share their contact information with the research team.
  - For example, offer multiple ways for people to take a screener survey: paper, URL, QR code, call-in by phone, etc. Several language services specialists commented that they and others who wanted to complete the screener survey had trouble accessing the survey from the Bitly link on the outreach flyer. The challenge came from having to type in the Bitly precisely as listed on the flyer to access the screener survey. Challenges accessing the survey also arose from whether the participant was using an Android or iPhone device. Depending on the device, the Bitly web address may differ slightly (e.g., using https vs http in the web address).
- Have the research team regularly engage with language services specialists and have language services specialists connect with one another to understand approaches, support outreach efforts, and problem solve together.
- For example, we shared lessons learned, questions, and solutions as they came up with one another.
- Offer time for the primary and secondary language services specialists to practice interviewing together to help ensure the translated interview guide sounds natural and the person conducting the interview gets to practice before interviewing a participant.
- Compensate participants for their time.
  - Most research groups have existing ways they compensate participants. Be willing to expand your thinking about compensation and compensation methods.

Compensation can include non-monetary benefits like in-kind donations or networking opportunities.

- Engage with language service specialists to develop accessible compensation methods (gift cards, electronic gift cards, money orders, PayPal, etc.).
- Develop internal processes to create greater flexibility and speed for processing individual payments. To respond to flexible compensation approaches, the internal system needs to be ready to adjust quickly.
- Consider offering at least \$50 per hour, more if the population is historically marginalized or harder to reach.
- While it is a best practice to compensate people for their time and work, we want to be thoughtful about how compensation may influence relationships or long-term impacts.
- Set up systems to protect personally identifying information collected during the study and to properly destroy or delete this data once the project ends.
  - For example, use secure, password-protected platforms to store people's data (consult with IT about available options) and only share personally identifying information (PII) with people who need to have it, such as people managing the contact lists or connecting with individuals to schedule an interview.
  - Do not commit to things you cannot control about how data will be used. If you collect it and it is stored with a government agency, you cannot commit that it will not be used in the future for things that are currently not allowed.
  - Develop a data security plan at the beginning of the project and request input from IT. The plan should include:
    - Outline of a centralized and secure participant database system to connect PII with needed recruitment and reporting information. This allows staff to use anonymized participant IDs in replacement of PII when communicating with one another.
    - Protocol for encryption standards on digital project materials (emails, notes, etc.).
    - Methods to destroy personally identifying information after the project ends. (Deleting files is not sufficient; additional steps are required to permanently remove files from the server on the back end.)
- Propose tracking and documentation processes as early as possible and be flexible to updating those processes to more effectively serve the project team.
  - For example, we used a table to track the status of each interview group and a spreadsheet to manage participant gift card payments.



- Interview group tracker  
New Mobility status update

Updated: 10/14/20

Language	LS Team	Screener survey status/outreach	Interview process check-in	Interviews	Outreach plan and recruitment materials
simplified Chinese	Translation: Yiran QC: Kaitlyn	Paused	Got recording sample; sent contact list; scheduling interviews	Planned: 8 Scheduled: 8 Completed: 8	Received outreach plan and recruitment materials
traditional Chinese	Translation: Yingwen QC: Kaitlyn	Paused	Sent contact list; scheduling interviews	Planned: 8 Scheduled: 8 Completed: 8	Received outreach plan and recruitment materials
Korean	Translation: Eunji QC: Jay	Closed	Scheduling interviews	Planned: 8 Scheduled: 8 Completed: 8	Received outreach plan and recruitment materials
Somali	Translation: Abdullahi QC: Farah	Open	Sent contact list	Planned: 8 Scheduled: 3 Completed: 5	
Spanish	Translation: Daniel QC: Jackie	Closed	Met to check-in, sent in recording; scheduling interviews	Planned: 8 Scheduled: 8 Completed: 8	Received outreach plan and recruitment materials
Tagalog	Translation: Jacqui QC: Laurence	Open	Nancy and Jacqui spoke on 10/13	Planned: 8 Scheduled: 8 Completed: 8	
Vietnamese	Translation: Megan QC: An	Paused	Got recording sample; scheduling interviews	Planned: 8 Scheduled: 8 Completed: 8	Received outreach plan; Megan provided differences between English and Vietnamese interview guide

- Gift card tracker

Name	Language	Message	Type of gift card	Brand	Contact info
	Spanish	iGracias por participar en las e	Physical card	Visa	
	Spanish	iGracias por participar en las e	Digital card	Visa	
	Spanish	iGracias por participar en las e	Digital card	Amazon	
	Spanish	iGracias por participar en las e	Digital card	Visa	
	Spanish	iGracias por participar en las e	Physical card	Visa	
	Spanish	iGracias por participar en las e	Digital card	Visa	
	Vietnamese	Cảm ơn đã tham gia buổi phỏn	Physical card	Visa	
	Vietnamese	Cảm ơn đã tham gia buổi phỏn	Physical card	Visa	
	Korean	시애틀교통부 뉴모빌리티 인	Digital card		
	Korean	시애틀교통부 뉴모빌리티 인	Digital card		

### Successes from the New Mobility interviews

- The research lead and project manager partnered early with language services specialists to create individualized outreach plans for reaching people who use specific languages.
- Having two language specialists per language on the team benefitted the outreach and recruitment effort.
  - The primary language services specialist was typically the lead who created the outreach plan and conducted the interviews.
  - The secondary language services specialist collaborated with the primary language specialist to develop the outreach plan and reviewed translated materials.
  - There was flexibility in who was responsible for certain tasks to highlight each language services specialists’ skills.
  - This system allows individuals with stronger language translation skills to be supported by someone who might have more expertise in community outreach.

- Assigning one project team member to communicate with the language services team members streamlined communications.
  - This ensured one person was tracking their efforts, could answer their questions quickly, and bring the research lead in as needed.
  - This also allowed the research lead to focus on the big picture and ensure specific tactical changes fit into the larger strategy.
- PRR conducted outreach through a variety of methods.
  - We made suggestions for outreach based on what we saw other teams doing.
  - For example, we noticed many teams planned to post flyers at grocery stores, and we asked teams that did not include this tactic in their outreach plan if this tactic would work for their community. Importantly, we did not make assumptions about which tactics would or would not work, we only shared ideas for consideration.
  - Posted flyers where people who use the languages included in the research spend time, including grocery stores, public spaces, and community hubs.
- The Korean and Vietnamese language teams reached out in-person at a popular grocery store frequented by the priority group to explain the project to grocery store owner in order to physically post flyers at the store
  - Posted on social media platforms our language services team members identified as relevant to the people we were trying to reach, including Facebook, WeChat, Instagram, etc.
  - Engaged with online and traditional media, including online news websites, community boards, radio stations, etc.
- Our Korean language service specialist participated in a radio interview with Radio Hankook.
  - Connected with the community and shared information through language services specialists' personal networks, local businesses, and community-based organizations.
- SDOT originally intended to conduct focus groups, but pivoted to individual phone interviews because of COVID-19. Due to the diligence and flexibility of team members, we still achieved our research objectives.
- PRR stored personally identifying information in Qualtrics, a professional and password-protected survey software and PRR's access controlled local network file server.
  - PRR did not share people's names or contact information with SDOT, instead the research team used identification numbers for each interview participant.
  - Additionally, PRR did not email files with personally identifying information.
    - Instead, the research team added permissions to these files restricting who could access them and only shared file path links with project team members who needed access to the file.

## Lessons learned from the New Mobility interviews

- Invite language services specialists and the outreach team to a meeting before the beginning of the outreach phase project so they can collaborate on their respective plans and build on each other's ideas. While the language services coordinator did share some aspects of outreach plans amongst individual language services specialists, it would be more effective to have a group meeting together before beginning outreach.
  - Share templates of outreach plans that include examples of what has worked for teams in the past, without implying an expectation that (a) everyone must do the same thing or (b) these are the only options available.
- Using an online screener survey made it easy for the research team to identify people to invite to the interview, but it created internal and external challenges.
  - Programming, pre-testing, and editing an online screener survey is resource intensive internally because it requires a high level of attention to detail and coordination with team members who may not be familiar with online survey platforms.
  - An online screener survey is not the most accessible format and reduces participation among people who are not comfortable taking surveys online or using computers.
- The team needs to offer multiple channels for sign-up while developing internal systems and process to streamline the information sharing.
  - Using a short link makes it easier for people to type the link into a web browser, but the Bitly service has limitations.
  - Participants must type the link into a search bar, the link is case-sensitive, and the link works differently on Android and Apple devices.
  - PRR created multiple Bitly links for each interview group to account for several different ways someone might type the link (e.g., all lower-case, sentence case, and capitalizing each word).
- The team needs to remain flexible and willing to pivot outreach plans.
  - Regularly monitor progress and evaluate whether it is time to course correct.
  - Some populations may be more difficult to reach, so be ready to consult the language services specialists to reassess outreach efforts and change tactics as needed.
- It may also be helpful to reach out to people outside of your organization who work in the specific community (e.g., connecting with the Seattle Office of Immigrant and Refugee Affairs to see if they have insights to share).
  - Social media advertising can reach large audiences; it is more effective when incorporated early in the planning and budgeting stage.
- Some communities may need more time to conduct outreach. Consult with the language services specialists and consider beginning outreach earlier for some communities if the language services specialist advises so.

- Look for and leverage creative outreach solutions, such as partnering with community influencers to extend your reach.
- The project team learned many valuable lessons with Tagalog outreach in the Filipinx community in particular. The Tagalog language specialists were invaluable in advising the project team and SDOT and helping problem solve when initial outreach efforts did not yield interview participants.
  - For example, the Tagalog language services specialists advised the project team on how to pivot initial outreach methods, which relied heavily on virtual tactics and a screener survey in Tagalog, and to try creative solutions, such as partnering with community influencers and the option to participate in the screener survey or interview in English.
- Social distancing precautions necessitated by the COVID-19 pandemic led PRR to begin outreach to the Filipinx community using virtual engagement tactics. As it became clear that a virtual engagement strategy would not produce desired recruitment results, our Tagalog specialists recommended a shift in strategy, emphasizing how important relationships and in-person connections are for effective engagement with the Filipinx community. They recommended working through community influencers to reach potential participants.
- Moreover, they advised that interviews would miss a large proportion of mostly younger community members who are Filipinx if the research materials were only available in Tagalog. Many in the community prefer to use English or “Taglish,” a combination of Tagalog and English, for daily life. Therefore, PRR made the screener survey and interviews available in English.

## **Project implementation, analysis, and reporting**

Clear communication and close collaboration across the project team supports successful project implementation and accurate analysis and reporting. PRR shared ideas, lessons learned, and templates across the team to ensure people could build on each other’s ideas and implement tailored outreach plans in a consistent way. We also engaged with the community through the language services specialists early in the process to ensure research materials resonated with people in the current moment.

The research team led analysis and reporting, but validated findings with language service specialists. The PRR project team also met to debrief successes and lessons learned from the New Mobility research and produced a set of recommendations to guide future SDOT studies.

### **Key recommendations for future studies**

- Encourage collaboration across the project team and provide ample opportunity for language service specialists to share their expertise and review deliverables, and for the analysis and reporting team to coordinate their efforts.
- Maintain high standards for documentation and write down success and lessons learned along the way.

- Meet with the team after major deliverables to debrief and document recommendations for future work.
- Do not include personally identifying information in the report.
- Analysis and reporting team provide input and ask questions after the first interview in each group to:
  - Ensure questioning is relatively consistent across all groups.
  - Encourage interviewers to collect feedback that addresses the questions being asked.

### **Successes from the New Mobility interviews**

- PRR maintained regular communication with the team to share ideas, lessons learned, and templates.
  - We reviewed the first set of interview notes and provided feedback or asked follow-up questions. We also shared the first set of revised interview notes as a template that other specialists could use.
  - We asked each specialist for a sample audio recording before they started interviews. This allowed us to troubleshoot problems before data collection began.
- We reached out to community members through language service specialists to learn about top concerns and priorities before finalizing the interview guide and screener survey and incorporated what we learned into those materials.
- We conducted consistent analysis across all interview language groups which made it easier to synthesize all data into a summary report.
- We included interview analysis for each person within a language interview group in the same template which made it easier to view trends within and across groups.
- We assigned a unique ID to each participant to preserve their confidentiality. We connected IDs to demographic information. Attributions for translated interview excerpts include information, as available, about language, gender identity, age, race, ethnicity, and income.

### **Lessons learned from the New Mobility interviews**

- Build time into the schedule and resources into the budget to allow space for collaboration and several rounds of feedback from a large team on major deliverables.
- Share templates of interview notes that include elements such as tables that make it easier to summarize information quickly.
- Ensure the entire team that will work together on the analysis and report are onboarded in the same meeting and are able to coordinate their efforts directly with one another.
- Ensure the entire team that will work on the analysis receives all interview notes in a timely manner and is notified when interview sets are completed.
- Be thoughtful on the division of labor in analysis. Weigh the trade-offs of having the interviewers collaborate for analysis versus having research members conduct analysis

from interviewer notes. Having research members conduct analysis from notes may dilute the original findings.

- This may be somewhat corrected in the review process. However, language specialists final review was limited near the end of reporting due to budget constraints.
- Having interviewers collaborate for analysis creates possibility of tunnel vision and a need for larger investment in analysis and reporting structures.