Older Adults’ Perceptions Regarding Transportation Services in San Jose, CA: Access, Barriers, and Innovations

Deborah Bolding, Ph.D.
MINETA TRANSPORTATION INSTITUTE
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OLDER ADULTS’ PERCEPTIONS REGARDING TRANSPORTATION SERVICES IN SAN JOSE, CA: ACCESS, BARRIERS, AND INNOVATIONS

Deborah Bolding, Ph.D.

May 2019
### Abstract

The purpose of this study was to examine the perceptions of older adults concerning barriers to the use of public transportation, to identify programs and services that best meet transportation needs, and to obtain suggestions for improvements or innovations in order to enable them to engage more fully in their community. Four focus groups, with a total of 25 participants, were held in three locations in San Jose, CA. While the participants were able to use public transportation to access shopping, medical services and other destinations, they expressed concerns related to physical barriers, frequency of services, the behavior of some drivers, and cost. The groups had limited suggestions for innovations.
ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

The purpose of this study was to examine the perceptions of older adults about barriers to the use of public transportation, to identify programs or services that best meet transportation needs, and to obtain suggestions for improvements or innovations to enable older adults to engage more fully in their community. Four focus groups were held in the Cambrian, downtown, and Eastside neighborhoods of San Jose, CA. Twenty-five older adults participated, with a mean age of 75 years old. The participants rode Valley Transportation Authority (VTA) buses at least weekly, with a smaller number of participants who also used VTA Access, Light Rail, and trains.

Focus group questions were semi-structured, and included topics related to utilization of transportation services (type, frequency, destinations); barriers to the use of public transportation; alternatives to public transportation; and participants' thoughts about changes or innovations that might be needed or helpful for older adults. Comments from the focus groups participants were categorized by clustering similar topics and ideas.

Older adults reported that the public transportation systems met their needs for shopping, appointments, and travel to senior centers. Concerns were related to physical barriers (such as distance to bus stops, availability of waiting areas, and safety getting on and off vehicles); schedules that required long wait times (especially during mid-day and weekends, and when using VTA Access services); customer service; cost for services; and cleanliness/sanitation of vehicles.

Although a primary purpose of the focus groups was to gather ideas from older adults about innovations that might meet their unique needs, the respondents came up with only limited ideas for new programs or services. Future investigations might include consumer focus groups to evaluate the pros and cons of proposed services through the older adults’ perspectives, rather than brainstorming ideas on their own. Additional investigation is needed to address whether the results would be similar in high and low-density housing areas of the city, for non-English speaking older adults, and for people who are not currently using transportation services because of a lack of knowledge or because of accessibility concerns.
I. INTRODUCTION

Older adults require safe transportation options in order to visit shops and obtain services (e.g., grocery shopping, visiting hair salon), health and wellness activities (e.g., medical appointments, nutritional lunch programs, picking up medications), and social, spiritual, and leisure opportunities. The purpose of this study was to examine the perceptions of older adults about barriers to the use of public transportation, to identify programs or services that best meet transportation needs, and to obtain suggestions for improvements or innovations in order to enable older adults to engage more fully in their communities. This topic aligns with the Mineta Transportation Institute’s (MTI) focus on developing safer surface transportation systems that improve equity through increased access to housing, services, and other opportunities; through extending surface transportation access to people of all abilities and socioeconomic levels; and through connecting people to the places where they live, work, and play.
II. BACKGROUND

The majority of older adults prefer driving rather than taking public transportation, when possible, because of the convenience, time savings, familiarity, and control over schedules, and because it requires less physical exertion.\(^1\) Approximately 85% of older adults aged 70-85 drive, and as few as 5% of older adults use public transportation.\(^2\) Older adults who do not drive make fewer trips to theaters, friends’ homes, religious institutions, and participate in fewer volunteer or other activities, perhaps contributing to decreased physical conditioning and depression.\(^3\)

When driving cessation occurs, perhaps due to visual, physical, or cognitive changes, pressure from family, or economic reasons, the older adult requires help from family or friends, or must rely on transportation services. Using public transportation presents its own set of challenges. Transportation schedules and routes cater more to commuter or work locations than accessing health services or senior centers.\(^4\) Perceived environmental barriers in the community include poor street conditions, curbs, hills, long distance to services, lack of benches, busy traffic, dangerous crossroads, crowds, and long wait times.\(^5\) These environmental barriers were reported to increase feelings of insecurity and to restrict out-of-home activities.

Older adults are able to mitigate these issues with public transportation by changing the task (e.g. walking more slowly), and by using assistive devices (e.g., canes and walkers).\(^6\) However, such strategies may solve one problem but create others. For example, an older adult who feels safer using a four-wheeled walker with a built-in seat when walking to a bus stop may find it difficult to lift the heavy walker onto a bus, or to find space on buses during crowded commute hours. Public door-to-door transportation services are available, but these can be costly, time-consuming, and limited in availability, and often require advance planning.

Researchers, professionals, and practitioners in the fields of transportation and aging have studied transportation issues using service delivery approaches.\(^7\) However, the voices of older adults are required, to describe barriers they perceive in using public transportation and the types of services that they would find most beneficial in maintaining their ability to participate fully in their community. The purpose of this study was to interview older adults living in San Jose, CA who use public transportation about their transportation needs, about the strengths of the current system, about suggestions for enhancing existing programs, and about ideas for new services.
III. METHODS

Approval for the study was obtained from the Institutional Review Board of San Jose State University. Four focus groups were held to explore older adult’s perceptions about existing services, and to elicit ideas for innovations to public transportation that might better serve their needs. One focus group was held at a senior housing center in the Cambrian district, one was held at a senior community center on the Eastside, and two focus groups took place at a senior community center in downtown San José, CA. All of the centers served low-income populations. Group meetings were held in the spring and summer of 2018. Criteria for participation were that the older adults be 65+ years of age, must independently use public transportation services a minimum of two times per month, must be ambulatory, and must speak English. Participants were given a $10 gift card for their participation.

Focus group questions were semi-structured, and included topics related to: types and frequency of transportation services that were used; barriers to use of public transportation; alternatives to public transportation that were used; and participant’s thoughts about transportation system changes or innovations that might be needed or helpful to older adults. The format for the focus group was semi-structured, with the investigator using a list of questions to guide the discussion (Appendix A). The focus groups were audio-recorded and the recordings were transcribed for analysis.

The responses from participants was first categorized by individual groups. The investigator bracketed text segments and coded them, e.g., frequency of ridership, type of transportation, barriers to use of public transportation, and ideas for change. Comments from participants within the same focus group were examined to determine if there was consensus or disagreement about a topic. The codes from the four different groups were then examined to determine the degree of consensus or disagreement between groups about the different topics.
IV. RESULTS

PARTICIPANTS

The focus groups included a total of 25 participants with both an average and a median age of 75 years old. The first focus group (nine participants) was held at the Cambrian Center Apartments, senior housing apartments for lower-income population in the Cambrian neighborhood on the southeast side of San Jose, CA. The second focus group (six participants) was held at the Eastside Neighborhood Center in the Alum Rock neighborhood of San Jose. The final two groups (ten participants total) were at the John XXIII Multi-Service Center, located in downtown San Jose. Information was not collected from participants regarding socio-economic status; however, all participants were recruited from subsidized senior housing or participated in nutritional lunch programs for low income older adults. Table 1 contains additional demographic information.

Slightly fewer than half of the participants rated their health status as good or excellent (48%), with the remainder rating their health as fair (36%) or poor (16%). Over half of these older adults found it somewhat hard, difficult, or impossible to walk six blocks (56%), and more than half used a cane (32%) or walker (20%) while walking (Table 2).

Table 1. Demographics of Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
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<tr>
<td>Male</td>
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<td>36</td>
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<tr>
<td>Female</td>
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<td>8</td>
</tr>
<tr>
<td>White, Hispanic</td>
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<td>8</td>
</tr>
<tr>
<td>African American</td>
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<td>16</td>
</tr>
<tr>
<td>Native American</td>
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<td>8</td>
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<tr>
<td>Asian</td>
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<td>60</td>
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<td>40</td>
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<tr>
<td>High school</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Bachelor’s degree*</td>
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Table 2. Self-Reported Health Status and Mobility

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<tr>
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<th>Number</th>
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<td>20</td>
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<tr>
<td>Good</td>
<td>7</td>
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<td>Fair</td>
<td>9</td>
<td>36</td>
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<tr>
<td>Poor</td>
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<th>Ability to Walk 6 Blocks</th>
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<tr>
<td>Not hard</td>
<td>11</td>
<td>44</td>
</tr>
<tr>
<td>Somewhat hard</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Difficult or not possible</td>
<td>6</td>
<td>24</td>
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<table>
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<th>Ambulatory Aid</th>
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<th></th>
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<tr>
<td>None</td>
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<td>48</td>
</tr>
<tr>
<td>Cane</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>2-Wheeled Walker</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>4-Wheeled Walker</td>
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<td>4</td>
</tr>
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</table>

**FOCUS GROUP DISCUSSION**

**Utilization of Transportation Services**

All participants learned to use the bus system on their own or with friends and family. One person also utilized the Valley Transportation Authority’s program that is designed to train adults in the use of public transportation. Two participants received special training from agencies serving visually impaired persons. Groups were approximately divided in their use of paper and electronic schedules for planning trips using public transportation.

Participants primarily utilized bus transportation, with a smaller number using VTA Access, Light Rail, and trains. Participants who use Light Rail and trains expressed a concern that drivers could not see older adults, and so could not be sure that they were safely in or out of the vehicle before closing doors or moving the vehicle forward. One participant stated, “The train does not see if a person’s trying to get out or get in. Maybe they see sometimes, but don’t pay attention, because you’ve got so many people coming in and out and people just pull out while people are trying to step out, going out the door, and then they fall out (Respondent 4, Cambrian).” Participants also reported difficulty reading the numbers on approaching buses; one participant suggested that it would be useful if there were “a button, and it says ‘the bus will be here or the bus is almost here or whatever’ ... you can’t always tell when it’s a distance away from you (Respondent 1, Cambrian).”

Outings were primarily to shop (particularly grocery stores), for medical appointments, and to visit senior centers (the Eastside and downtown adults were part of senior nutrition programs), with a few participants identifying churches or other spiritual destinations, the library, pharmacy, or visiting family as destinations. Leisure destinations were limited (i.e., there were no mentions of parks, movies, concerts, etc.), although when questioned about whether they take the bus for fun, participants in one group expressed interest in special recreational outings for seniors (for instance, they gave the example of a bus from the downtown senior center to Fourth of July celebrations at a large park in a different part of the city).
Results

Frequency and Timing of Ridership

Participants in the Eastside and downtown groups reported riding public transportation between three and seven days a week, and participants in the Cambrian group reported riding public transportation between one and five days per week. The Eastside and downtown groups were part of a daily nutrition program that provided lunches, which appeared to be the reason for greater ridership.

Inclement weather was a barrier to bus ridership. Participants from the Cambrian area reported that there were shelters near their bus stops, but participants in the other two areas reported that there were few shelters near their bus stops for protection during inclement weather. Because of safety concerns and inconvenience, some participants cancelled or rescheduled trips during rainy weather. For example, one person stated, “The forecaster knows a couple days ahead it’s going to be raining, so I’ll say, why don’t we go to the store today or tomorrow, because on Wednesday, rain’s coming (Respondent 5, Cambrian).” Participants were hesitant to cancel some trips (such as those for medical appointments) during inclement weather, even when there were no shelters, because of difficulty rescheduling the appointments.

The participants rarely used the bus services at night. A few participants cited decreased vision as their reason for not traveling at night. Personal security was an additional concern, with one woman stating, “Some people prey on older people. They think you have a lot of money, but they don’t realize your money is all gone by the time you get it (Respondent 6, Cambrian).” Endurance may be another reason; as one woman stated, “By 3:00 o’clock, I’m done for the day (Respondent 1, Cambrian)!”

Travel during rush hours was reported by participants to be challenging, because buses might not stop if they were full, thus increasing the time participants stood waiting at stops. Conversely, during non-peak hours, the decreased frequency of buses meant that if they missed a bus or connection, the overall travel time was significantly increased. Weekend and holiday travel was limited, by choice, because of the long waits for buses, particularly if transfers were involved. One participant described the effect of these long waits by saying: “Oh, you don’t know how hard it is, seriously, you don’t, because I can’t stand too long when I wait for the bus. There ain’t no benches, there ain’t nothing, I lean against the wall or whatever. Oh man, I’m hurting, Oh, my God, I better go back home. I don’t have a choice but go back home (Respondent 6, Eastside).”

Physical Access

Participants were familiar with accessibility features for the different modes of transportation. They appreciated ramps and lowering features, and designated seats at the front of the bus. The participants reported that it was challenging for them to walk more than a few blocks, whether because of endurance or because of pain, and that the lack of seating at bus stops made the waits for buses more difficult.
Cost of Services

Concern about the cost of taking public transportation was expressed during the discussions in all four groups. The $2.50 daily fare and $30/month for transportation passes seemed high to the participants. One participant stated, “When you’re on a fixed income, you are keeping track of every cent, and if they change something on me, you—you can’t go (Respondent 1, Eastside).” Some of the participants at the downtown and Eastside center received a free monthly bus pass as part of the nutrition program at the senior centers, and they were appreciative of this benefit.

Door-to-Door Services

A service utilized by a few participants was VTA Access, a paratransit service which picks up participants at a designated address and delivers them to another designated address via car or van (sometimes transportation companies refer to this practice as a door-to-door or curb-to-curb service). Few of the participants in this study utilized this service.

Participants who were eligible for VTA Access generally liked this service for medical appointments. The challenge with this service could be long waits either before or after the appointments. One participant characterized the challenge by telling us, “They give you a 30-minute window if they’re going to pick you up… and when you’re coming back. So sometimes you are early on the beginning trip and get to the doctor. The doctor sees you early and you’re out, and you’ve got about an hour’s wait before you even hit that 30-minute time window [for the ride home]. But I just feel so blessed that we have that service that I don’t like to complain about it. I just take a book and I’m doing more reading than I ever read in years (Respondent 6, Cambrian).”

One group was concerned about the need for special transportation services, not for themselves, but for dialysis patients. The following dialogue was recorded at the Eastside center:

Respondent 3, Eastside: “He was supposed to go to dialysis. So they’re going to take me all the way to Bascom to the blind center and this guy—the dialysis center is out in Milpitas and they weren’t going to take him…I said, no, go ahead and take him to dialysis, you know? Because to me, that’s more important at this point. I was in the car for two hours going to here and there.”

Respondent 1, Eastside: “I’ve had a pet peeve about dialysis. People should not have to be driving with other people. They need to get to their appointment and they need to get home afterwards and that would help everybody if they had their own rides… They are tired, and they’re in pain, and they want to go home, and they’re weak from dialysis, and then they have to run around all over like everybody else. Well, they shouldn’t have to.”

These comments were in contrast with those of a participant in the same group who received taxi vouchers from the Santa Clara Health Plan for low-income individuals. She noted, “And then when you’re through, you call the number [taxi] and within five minutes,
boom, there's another taxi. So, I don't have any waiting period (Respondent 5, Cambrian).” Paying privately for taxis was viewed as an expensive option, and was rarely used by participants in any of the groups. None of the participants had used ride-sharing services (e.g., Lyft, Uber), with several participants citing the lack of either a smartphone or credit card, both of which are necessary for this service.

Satisfaction with Services

Most of the participants expressed satisfaction with the bus service, and two foreign-born participants considered the service considerably better than what was available in their native countries. All groups reported that drivers generally would lower the bus if needed, and would wait for them to be seated. The Cambrian group was universally positive about service, whereas the Eastside and downtown groups reported grievances such as drivers who did not hear or respond to requests for stops, which required older adults to walk longer distances, drivers who were impatient with the older adults, and drivers who did not consistently use bus lowering equipment or ramps. These groups also reported instances of drivers who were not aware of or who ignored older people who were trying to hurry to catch the bus, or who fell inside or outside of the buses. Discussing safety, participants from the Eastside had this conversation:

Respondent 6, Eastside: “Oh, they don’t wait until you sit down. No. They just go.”

Respondent 4, Eastside: “Some of these buses, they don’t lower their stuff.”

Respondent 6, Eastside: “No. They don’t. Yeah. I see a lot of people fall down.”

Interviewer: “And then what does the driver do?”

Respondent 6, Eastside: “They don’t do nothing.”

Respondent 4, Eastside: “Nothing”

Respondent 2, Eastside: “They never do nothing.”

Several riders from the Eastside and downtown groups reported problems with cleanliness of the buses. Three participants, including one with a visual impairment, reported inadvertently sitting in seats in which a previous passenger had urinated; two of these incidents were on buses, and one was in a VTA Access vehicle. The visually impaired rider reported that he always stands on the buses now, even though it is painful for him.

It was reported that sometimes problems arise because of communication issues. For example, drivers sometimes did not hear requests for stops, which resulted in older adults who were required to walk farther distances. They also included language differences; one participant described a situation in which “[the driver] pulled over past the old lady’s bus stop, and he tell this old lady, ‘speak English, I cannot understand what you are saying. So, get out of my bus,’ and left her—he done passed her bus stop way back there somewhere and now he dropped her in the middle of nowhere. This old lady had to walk all the way down. I was so mad at him (Respondent 4, Eastside).”
Ideas for Change/Innovation

A few participants had read about innovative services for older adults, or had experienced additional services in other cities, but in general the focus groups had limited suggestions for ways in which transportation might be improved. Participants in the all the groups reported that they would like to have shelters and places to sit at the stops. Additional features they described as desirable included visual displays at bus stops, as well as voice displays for the visually impaired, informing them of how long the wait would be for the next bus and of changes to schedules.

Participants who use VTAAccess would like a change in its scheduling system to decrease the time waiting, and an emergency service that would operate in case of schedule changes. For example, one woman was due to arrive at the train station at 8:30 pm, but due to train delays she didn’t arrive until later at night. She didn’t know how to notify VTA Access at night, and had to take a taxi. She told the taxi driver, “I can’t pay you your full fee, this is how much money I have.” Fortunately for her, he accepted that amount and gave her a “senior discount”.

Participants also wanted greater availability of direct travel to medical appointments for persons with chronic illnesses (e.g., those with a need for dialysis). The focus group participants, half of whom described their health as being fair or poor, realized that although travel could be challenging for them, it was more difficult for others, and wanted to help them.

Ride-sharing services were appealing to the older adults, but they were concerned about the cost of such services and the need for a credit card or smartphone. Although we did not record the number of participants without a credit card or smartphone, it appeared that the majority of people in all four groups had neither.
V. DISCUSSION

Four focus groups discussed topics concerning barriers to their use of public transportation, the programs or services that best meet their transportation needs, and suggestions for improvements or innovations to enable older adults to engage more fully in their community. The types of concerns expressed by these groups have been raised in previous studies, and were related to the distance people needed to walk to and from transportation stops, the comfort and availability of waiting areas, the frequency of service, operator training, personal safety, and the cost of obtaining services.\(^8\)

Overall, participants expressed satisfaction with the system, which could be used for reaching stores, medical offices, senior centers, and church, although limited operations on Saturdays, Sundays and holidays deterred some participants from traveling on those days. Transportation services were utilized to visit senior centers, which provided social activities, lunch, and other food and nutrition programs. One woman took the bus to the library, but leisure and pure social events were rarely given as reasons by participants in these focus groups for using public transportation. It was not clear whether this was due to limited financial resources, limited social networks, limited physical abilities, or lack of interest. More than half of the participants reported that it was challenging to walk a distance of six blocks, and that this made travel to many areas inaccessible. Concerns described in other studies about neighborhoods, such as uneven sidewalks or lack of sidewalks and shade, were not included in these focus group discussions.\(^9\)

Older adults with limitations in hearing, vision, and physical abilities faced greater barriers to the usage of public transport. Based on comments by participants, helpful upgrades to services might include stronger operator education and oversight regarding safety and customer service for older riders. These groups, as well as previous literature,\(^10\) cited issues of drivers not calling out stops, drivers’ inappropriate attitudes, drivers’ lack of knowledge, and drivers’ prejudice.

Other findings related to barriers suggested that there are needs for greater cleanliness/sanitation of buses, for more frequent service on weekends and during non-peak hours, and for changes to the VTAAccess services. Beneficial changes might include the introduction of shuttle buses from participants’ homes to fixed locations such as senior centers. In order to address limited English proficiency or other communication issues, an icon or request button could be placed near the bus door to let drivers know when accommodations are needed.\(^11\) Implementation of these suggestions might improve satisfaction and safety of riders.

Better real-time communication about bus arrival times or delays was another topic of discussion, with suggestions being made for visual and auditory displays at bus stops or for smartphones. The limitation of providing announcements on smartphones was that for financial, technology literacy or personal reasons, not all older adults have access to smartphones; however, adding these features to every bus stop would be expensive and technically challenging. One solution might be to install such visual and auditory displays at stops near senior centers, older adult housing, medical centers, and major shopping areas.
Most participants did not have suggestions for alternatives to fixed route solutions and VTA Access, and were not aware of existing alternatives such as volunteer driver options, niche ride-sharing options for older adults, and increased access to taxi vouchers for very low-income older adults. Public transportation-taxi partnerships have had success in some United States cities, and can be a less expensive and more responsive alternative than paratransit operations. The public transportation-taxi partnership model requires oversight operations, driver training, and accessible vehicles. One problem with this model in recent years has been a lack of taxi drivers due to a shift of drivers to ride-sharing services.

The use of ridesharing services was low in this group; this was in accord with a previous study that found that only 3.3% of the older adult population used rider-sharing services, and that this fraction tended to be younger, male, and more highly educated. Older adults are not necessarily less technologically-savvy than younger adults, however, and the use of these services warrants further study. There are niche programs (such as GoGoGrandparent) through which older adults can call and schedule ride-sharing services, but these require infrastructure support, training for the older adult users, and credit cards.

While some persons may consider the costs of riding public transportation to be affordable, many of the participants in this study expressed concern about the costs relative to their fixed incomes. This has potential public health and quality of life implications beyond meeting transportation needs of older adults. A previous study in the United Kingdom found that ridership in the research population increased by 8% when older adults were given free passes; other effects of these free bus passes included decreased depressive symptoms and loneliness, and increased volunteering and contact with friends and children.

A primary purpose of this study was to garner suggestions for innovative changes to public transportation from older adult rider perspectives. The discussion about alternative solutions was disappointing in terms of innovative ideas for improving or creating services for older adults. This was because the focus groups were not familiar with possible options, and tended to focus on current systems and problems. One suggestion for future research would be to offer groups a list of transportation innovations and ask them to brainstorm about the pros and cons of each option, rather than asking them to come up with their own ideas for innovations in services. Another option would be for planners to collaborate with older adults in product development and implementation phases, and to make modifications, if necessary, in early phases of transportation projects based on feedback from older adult riders.
VI. LIMITATIONS

This was a preliminary survey of older adults that considered focus groups from only three parts of the city. The population comprised low-income seniors who were currently using public transportation. It did not include the population of older adults who cannot use public transportation because of a lack of knowledge about the system, or because of inability to get from their homes to a transportation stop because of mobility issues. The participants in the focus groups were all English-speaking, though each of the centers from which they were drawn also had large non-English speaking populations, including people who speak Mandarin, Cantonese, Spanish, Vietnamese, and other languages. The neighborhoods that were considered in this study had high density housing areas and were along active transportation corridors. There may be differences between these neighborhoods and areas where the housing is less dense and where there are fewer public transportation choices.
VII. CONCLUSIONS/SUMMARY

The perceptions of older adults’ in four focus groups in San José, CA were that the public transportation system met their needs for shopping, appointments, and travel to the senior centers. They expressed concerns related to physical barriers (distance to bus stops, waiting areas, safety getting on and off buses) and frequency of services, which also presented additional barriers for persons with conditions causing decreased endurance or pain. Suggestions for operator education included training in communication and safety needs related to older adult and non-English speaking riders. Additional investigation is needed to address whether the results are similar in high and low-density housing areas of the city, with different socio-economic groups, for riders with greater mobility challenges, and for non-English speaking older adults. Future studies might examine innovative programs through the use of older adult citizen evaluators to test and provide feedback on the programs at each stage of development.
# APPENDIX A: SEMI-STRUCTURED FOCUS GROUP QUESTIONS

| Ice-breakers, General Use of Public Transport | Welcome, consent forms, confidentiality of information shared in group,  
Welcome, consent forms, confidentiality of information shared in group,  
Tell us about a memorable trip on public transportation here in San Jose  
How old were you when you first started using public transportation?  
  • For example: Did any of you use it as a child to go to school, or commuting to work?  
Tell us about your use of public transportation. Do you use [BUS], [CALTRAIN], [LIGHT RAIL]?  
How did you learn about how to take the bus or other public transportation?  
  • Did you take training through any of the VTA programs [Daycations]?  
Do any of you use Outreach?  
  • What do you like or dislike about door-to-door service with Outreach?  
| Uses/Frequency | Uses/Frequency  
Do you typically travel by yourself or with spouse/family/friend?  
Tell me about where you go when you take the [BUS], [TRAIN], [STREETCAR]:  
  • Ask about the following, if necessary: visit family, church, movies, grocery, other shopping, library, museums, etc.  
  • How often do you typically take the bus in a week? In a month?  
  • Would you go more often if you could?  
  • How far do you have to go to get to the bus stop?  
  • Is there a bench for you to sit on while you wait?  
  • Is the stop covered?  
  • Would you go out if it were raining?  
  • Do you try to go at certain times of day or days of the week?  
  • Do you use a Clipper Card, or do you buy tickets the day of travel?  
| For Seniors/Disabled | For Seniors/Disabled  
1. Load your Clipper Card with Clipper Class  
2. Tag your Clipper Card every time you board a VTA bus or light rail vehicle*.  
3. Once you’ve paid the equivalent of $2.50 in fare for the day (Seniors/Disabled/Medicare) or $5.00 (Youth), you have earned a Day Pass and all your rides on any VTA bus or light rail vehicle will be free of charge for the rest of that day.  
  • Have you ever asked a driver to let you off closer to your stop? [e.g., Night Stop program]  
| Barriers | Mobility and Physical Requirements  
Do you have any physical difficulty getting to the stop?  
Do you use a cane or walker or have difficulty walking that makes it challenging for you to use public transportation?  
How far do you have to walk to get to a stop?  
How many transfers do you have to make on a typical trip to…?  
What services/features help you? (for example, lifts, kneeling buses)  
How helpful are the bus or transit drivers?  
What features make it harder?  
What change do you think might help you get out more often?  
| Barriers | Barriers  
What are barriers to use of public transportation?  
Getting to site, schedule, time involve, etc.  
Do any of you use canes, walkers, other equipment for mobility? What is that like?  
Describe how the lift ramps, elevators, escalators, and other options work.  
How does cost of using VTA compare to other transportation options?  
Do you feel safe getting to and riding transportation?  
| Public Transport Alternatives | Other transportation  
Do you have a driver’s license and access to a car? Do you drive part of the time and take public transportation part of the time?  
What other ways do you get around? (walk, family, friends, bike, etc.)?  
Have you ever used any private door-to-door services [for example, Uber, Lyft, taxi, hospital, senior center, or faith-based services]? What do you like or dislike about door-to-door services them? How would you compare them to public transportation?  
What other alternatives have you tried or use for getting around town?  
What do you like/dislike about these alternatives?  

### Appendix A: Semi-Structured Focus Group Questions

<table>
<thead>
<tr>
<th>Future</th>
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<tbody>
<tr>
<td>• Think about if you were in charge of public transportation for Santa Clara County. What would you do or change to make it better?</td>
</tr>
<tr>
<td>• Look into the future. What inventions have you heard about that might help make getting to events easier? (e.g., self-driving cars). Variations: imagine a perfect system, have you read about anything will change how you travel?</td>
</tr>
<tr>
<td>• Some places are using [VOLUNTEER DRIVER PROGRAMS] [TRANSPORTATION VOUCHERS (low cost)]....what do you think of that?</td>
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<table>
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<tr>
<th>Closing</th>
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<tbody>
<tr>
<td>Ask for additional thoughts, thank the participants, distribute gift cards</td>
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</tbody>
</table>


BIBLIOGRAPHY


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Deborah J. Bolding, Ph.D., is Assistant Professor in the Occupational Therapy Department, College of Health and Human Sciences, San Jose State University. She is an occupational therapist for the Injury Prevention Program at Stanford Health Care. She is also an occupational therapist for the Injury Prevention Program at Stanford Health Care, where she evaluates the efficacy of fall prevention programs and teaches home and community safety for older adults.
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San José State University, of the California State University system, and the MTI Board of Trustees have agreed upon a peer review process required for all research published by MTI. The purpose of the review process is to ensure that the results presented are based upon a professionally acceptable research protocol.
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LEAD UNIVERSITY OF
Mineta Consortium for Transportation Mobility

Founded in 1991, the Mineta Transportation Institute (MTI), an organized research and training unit in partnership with the Lucas College and Graduate School of Business at San José State University (SJSU), increases mobility for all by improving the safety, efficiency, accessibility, and convenience of our nation’s transportation system. Through research, education, workforce development, and technology transfer, we help create a connected world. MTI leads the four-university Mineta Consortium for Transportation Mobility, a Tier I University Transportation Center funded by the U.S. Department of Transportation’s Office of the Assistant Secretary for Research and Technology (OST-R), the California Department of Transportation (Caltrans), and by private grants and donations.

MTI’s transportation policy work is centered on three primary responsibilities:

Research
MTI works to provide policy-oriented research for all levels of government and the private sector to foster the development of optimum surface transportation systems. Research areas include: bicycle and pedestrian issues; financing public and private sector transportation improvements; intermodal connectivity and integration; safety and security of transportation systems; sustainability of transportation systems; transportation / land use / environment; and transportation planning and policy development. Certified Research Associates conduct the research. Certification requires an advanced degree, generally a Ph.D., a record of academic publications, and professional references. Research projects culminate in a peer-reviewed publication, available on TransWeb, the MTI website (http://transweb.sjsu.edu).

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