



EXPERIENCES OF MICRO-NAVIGATION IN NEW YORK STATE'S CAPITAL REGION

Moderated Focus Groups and Data Analysis

Executive Summary, provided by Sage Shoppe Innovations and CDTC staff

What

Sage Shoppe Innovations, LLC facilitated eleven focus groups in April 2018 to discuss gaps people experience in the Capital Region's transportation system. The focus was on those transit users often not represented in the transportation planning process, and their micro-navigation strategies. Two of the focus groups consisted entirely of health and human services agency staff members to provide insights on the management and coordination of transportation accessibility. In total, there were 136 research participants that included 74 respondents who completed the Disadvantaged Transit User Recruitment Survey. Sixteen of the recruitment survey respondents also participated in the focus groups held throughout the region. Sage Shoppe recruited fifty-seven additional participants for the focus groups. Two client-centered focus groups were also held that included five health and human service agency staff members. The recruitment strategy positioned the experiences, positive or negative, of the transportation user-consumers as central to understanding gaps in connectivity. Centering transit user-consumers was important for understanding the transportation options available to them. The focus groups gained insights about human factors of the Capital District's transportation system. They also recognized residents face multivalent social, economic, and political stressors. The following seven transportation components were included in the research design: buses, transit shelters, curb extensions/cuts, sidewalks, crosswalks, multi-use/bicycle paths, and accessibility factors.

Why

Seeking the highest level of quality for the greatest number and categories of users for the most economical rate in full consideration of public fiduciary limits and social stressors, makes planning and service delivery decision-making adjustable and alterable processes. Participatory design and input by resident user-consumers has demonstrated long-term benefits for transportation planning and policymaking. The recommendations, thoughts, concerns, considerations, and direct experiential voices of some residents using transportation services are grossly underrepresented or wholly omitted in organizational decision-making. Decision-making conducted "on behalf of" a given group, population sector, or constituency, assumes that leadership grants powers of autonomous, representative authority that does not require consultation or coordination with those designated as beneficiaries. Subsequently, inconsistent value is created. Inattention to the navigational challenges faced by transportation disadvantaged populations can only exacerbate and extend the challenges and gaps in service identified in this research report.

Sometimes the dismissiveness with which qualitative data is received and acted upon by leaders and policymakers in legislative bodies, the third sector, and business and economic development entities leads to the inflation and over-valuation of statistics and quantitative measures, which are unable to capture human-centered patterns of use, process improvement, or experiential relationships formed to transportation services. Qualitative data emerges from communicative and expressive human interactions with the built environment and other human beings. Points of view and opinions do not emerge from inside a vacuum or "neither space" of transportation service usage or delivery. Though good anecdotes enabled the researchers to collect human-produced characterizations of their individual experiences, the dynamic group setting also fostered the iteration of shared experiences and expectations. When resident user-consumers of the transportation system become informants to organizational and governmental decision-making, the information provided can alter the quality of service delivery and expand access to wider aggregations of the population throughout the region.

Who

The disadvantaged transportation user may be disadvantaged due to social inequalities that operate as contributory and important mutually-connected features of transportation disadvantage. Disadvantaged transportation user-consumers may be disadvantaged due to one or more of the following factors: 1) income; 2) spatial and physical segregation; 3) conditions of aging; 4) physical impairment or disabilities; 5) new residents to the Capital District and 6) non-native English speakers. The facilitators did not present transportation disadvantage as a single factor state or condition, but rather as a relationship between other forms of social and economic marginalization and exclusion. Transportation disadvantage was presented as an open concept determined by focus group participants as they were prompted to narrate the situations or contexts that illustrated their experience as “a disadvantaged transportation user.”

For groups not represented in urban or transportation planning professions, or as moderators within transportation planning processes (i.e. the disabled, seniors, low-income populations, people of color, and others traditionally transportation-disadvantaged), the project positioned them as “local experts.” For many focus group participants, having others in the room that they may or may not have known from other contexts, established a setting of open and direct communication. Together, focus group participants iterated, co-generated, and narrated ideas and experiences through conversational exchanges about their particular and shared transportation use experiences.

Results

Gaps in connectivity were captured through both quantitative and qualitative data to provide a holistic composite of key statistical demographic factors that work in tandem with the narrated ones. Sage Shoppe utilized a research script that used conversational prompts as well as audience response devices to foster greater human interactivity. Audience response devices were hand-held objects with buttons and letters of a size to not impede those with visual or motor impairments.

Quantitative Data

The following graphics and tables summarize the quantitative data provided by participants through the use of the audience response devices.

The most frequent trip that departs from my current sleeping location is to:

Trip Purpose	Number of Respondents
Appointments	21
Employment	17
Other	12
School	8
Recreation activities	5
Visit family members, relatives, or friends	5
Skipped	1

What best describes your annual household income?

Income	Number of Respondents
Less than \$10,000 per year	27
\$10,000 to less than \$20,000	18
\$20,000 to less than \$30,000	11
Skipped	5
\$30,000 to less than \$40,000	3
\$60,000 and above	3
\$50,000 to less than \$60,000	2

Select the gender category that best defines you

Gender category	Number of Respondents
Male	32
Female	31
Transgender Female	4
Gender Variant/Non-Conforming/Queer	1
Skipped	1

My ancestry, family and personal identity is represented by the term...

Ancestry, family and personal identity	Number of Respondents
Person of African Descent	26
Person of European Descent	14
Not Listed or Do Not Wish to Answer	9
Indigenous Person/Native American	7
Two or More of the Terms Below	6
Person of South or Central Asian Descent, including "East Indian" peoples from the Caribbean	3
Latino/Latinx/Luso-Iberian (US born)	2
Person of Asian Descent	1
Skipped	1

I use __ language for transportation navigation

Language	Number of Respondents
English	64
Filipino	1
Other Language not Listed	2
Skipped	2

What is your approximate age by decade?

Age	Number of Respondents
20s	17
30s	10
40s	7
50s	18
60s	11
70s	5
80s	1

More than 55% of the time when I use region transportation service I am trip planning for these people or person

People or person	Number of Respondents
Me	49
My sibling(s) and me	7
My children (more than one child) and me	5
Other relationship not mentioned	3
My child/children, sibling(s), my parent(s), and me	2
My child and me	1
My parent(s), grandparent(s), and me	1
Skipped	1

I have a disability recognized by the Americans with Disabilities Act

Disability	Number of Respondents
Yes	40
No	29

I face public safety challenges using the transportation system in the Capital District due to a physical impairment or disability

Public Safety Challenges	Number of Respondents
Yes	25
No	44

I face built environment challenges using the transportation system in the Capital District

Built Environment Challenges	Number of Respondents
Yes	32
No	36
Skipped	1

In your household, family, or living context, how many people, including you, utilize public mass transportation services that exist in the Capital Region?

	Number of Respondents
Household members using public transportation	
2	12
3	9
4	6
5	3
6	1
7+	1
Every person	15
Not Applicable	20
Skipped	2

What other means of transportation would cause you to stop your use of public transit?

Other means of transportation	Number of Respondents
Personal automobile	37
Door-to-destination car or shuttle service, like taxis, Uber, and Lyft	20
Skipped	6
Electric Bicycles	4
Golf carts	2

Absent or damaged route and direction information at bus stops and on buses

Nuisance level	Number of Respondents
Most common nuisance	28
Second most common nuisance	30
Least common nuisance	10
Skipped	1

Unreliable bus schedules/The times for my primary route are consistently wrong or runs early or late

Nuisance level	Number of Respondents
Most common nuisance	21
Second most common nuisance	31
Least common nuisance	14
Skipped	3

The last two questions were part of a series of questions that asked participants to rate aspects of the public transit system that they found problematic and challenging. The two highlighted here were found to present the most nuisance. The others were availability of shelter and benches at bus stops,

smoothness of the ride and stops, physical condition of stations or bus stops, frequency of bus-service/wait times are long, connections and transfers in bus service-Drivers don't wait for drivers on connecting routes, and traffic lights-green lights mean my connection pulls away before I can cross to meet it.

Qualitative Data

The following describes audio clips embedded in the final report for their relevance. At the time of writing, the [full multi-media report](#) is online. While numerous participants expressed appreciation for the transportation system, the facilitators focused on the transportation gaps that people experience.

The planning process for a STAR user - In the audio, a participant describes emailing STAR at 2:30 p.m. the day before the focus group to request a 9:30 a.m. appointment time the day of the focus group. She explains that this means STAR will pick her up so that she arrives by 9:30 a.m. the next morning. However, she called at 9:30 p.m., the evening before the focus group to confirm her ride. She learned that the ride was scheduled for a 9:30am pickup time with a confirmed pick-up time of 9:50 a.m. This twenty minute difference in route computing meant she would not arrive on time for the 9:30 a.m. focus group. She then called staff at CDTA, who advised she might have to call early the next morning to talk to staff members directly involved in coordination. A staff person was able to change the pick-up time in the computer system the night before to work towards ensuring she would arrive on time.

Travel to a bus stop and absence of shelter - In this clip, a participant describes taking the 450 bus home from work late at night, from a stop without a shelter, near Freemans Bridge Road. This was particularly uncomfortable in the winter due to rain, snow, and wind at times. He called CDTA to request a shelter on advice that CDTA is responsive to customer complaints, however a shelter was not installed.

Onboarding and Built Environment Challenges - Participants describe many sidewalks being in a condition that preclude the use of strollers along them. Respondents state a requisite need to push strollers in the street, which "a lot of people don't like." We can presume the respondent's "a lot of people" references motorists. Getting double strollers on the bus can also be extremely difficult. The safety hazard mitigation rule is that you should fold your stroller before boarding. However, participants with two children in a double stroller noted that the children then have to get out, and the parent may need to hold one child and the stroller, while also ensuring the other child stays close to board the bus. Some drivers understand traveling with children and will kneel the bus or put the ramp down so the stroller can be lifted on to the bus. Some drivers don't emote or exercise patience. The process inhibits other people whose focus is arriving to work on time. A participant stated that she tries to walk the distance to her destination, rather than take the bus. Her reason is twofold. She states that the bus is often not on time, and she is concerned about inconveniencing others. Another site specific respondent expressed interest in preferential seating for parents with young children in addition to people with disabilities.

Riding a bus to seasonal work in Saratoga Springs - In this recording about the region's workforce needs, a participant asserts that there should be two vehicles on the Route 450 bus leaving for Saratoga Springs about 7:50 a.m. because there are so many people that people fight for seats on the bus. The extra bus means that people leaving work will have to stand for the hour-long ride.

Exiting a bus and safety - Multiple participants describe being bothered by "bums" at bus stops who make them uncomfortable due to the inappropriate questions asked and pursuant anger. Some participants know which bus stops are problems, and try to avoid them if they have enough time. One

respondent describes a police officer who pointed a gun at him when he was on a bus that someone was thought to have boarded after robbing a bank. This specific bus trip was his first time on the bus, and he hasn't taken one since the incident, preferring to walk instead.

Places we cannot go –Participants at the Saratoga Senior Center describe in detail the mobility obstacles they face because a bus doesn't go to many places they want to go, such as Hamilton Street, Saratoga Hospital, Church Street, the Senior Center, or their church supported residential living complex. At the conclusion of their social activities at the center, they could navigate to another bus at a different bus stop, but the schedule would require them to wait an hour before boarding.

Switching modes of transportation - A participant discusses his idea of a more equitable transportation system as one that "spends less" money for cars and more for a public transportation system that values walking and bicycling. Another participant notes that people looking for a job would still need to have a car, because many employers refuse to hire people who don't have a car. They conclude that if more people used the bus and it were funded better, the system may work better for everyone, including people looking for work.

Lack of sidewalks and the impact on destinations - A respondent who works with adults who have intellectual disabilities discusses difficulties encountered by the people she serves. This includes trying to access job locations that don't have sidewalks. Some people can't take the bus because there aren't sidewalks at all. Also, they note that they are unable to prove how and why this built environment obstacle impacts the disability they have and why it should grant them access to STAR services. Uber is mentioned as an option but it would increase their transportation cost.

Technology and the Navigator Card – A respondent notes that Price Chopper can add their points to the Navigator Card immediately, but she has to wait two days to use funds added online from her personal bank account. She is a senior who also has a disability, and finds it much easier to add funds herself online than having to physically travel to a Price Chopper store.

Adjusting to Technological Change – After returning home in early January 2018, having been incarcerated, a respondent experiencing community re-entry issues received a number of day passes. The passes "stopped working" in April. Without a Navigator Card, he couldn't get a day pass, and the cash fare is more.

Technological Impact on Transit – An agency staff member describes the STAR application process as lacking a mechanism to keep applicants up-to-date on the progress of their application. However, she also notes that any online system should not encumber the ability for people who don't have an internet service provider or someone who understands online systems they can call for assistance. In addition, any web-based system of service delivery should enable a person with limited digital literacy to permit and approve third party access in order to communicate with STAR on their behalf. Doing so may foster the use of streamlined online communication, even for those people who don't have residential internet service or a direct means of access.

Accessible and affordable transportation – A participant describes paying \$250 for accessible van transportation from Saratoga Springs to the Albany bus station the prior year, because it was the only accessible transportation available to her. She asks if the bus company could look into making accessible cabs available in the Capital region having used them in Manhattan.

Travel destination, aging, and distance – Participants discuss population trends in Saratoga County and state that the fastest growing segment of new residents are people over 85 years old. This demographic shift also increases the need for public transportation services for seniors and a population that increasingly will face physical impairment and many types of disabilities.

Conclusion

Pedestrian Infrastructure

Infrastructure at key bus tops and in neighborhoods was mentioned as an obstacle with regular frequency, due to both absence and poor construction or design. This notably included lack of curb ramps. Clearing of water and snow from sidewalks is especially problematic to transportation disadvantages users, and municipal service responsibilities vary and appear to be unknown by residents. Policies or ordinances outlining inclement weather responsibilities for renters, businesses, multifamily property owners, and single-family homeowners might help. Threats to personal safety also impede navigation as people feel forced to alter their routes to avoid certain individuals or situations.

Seamless regional system

Focus group participants did not express a regional identity, rather one grounded by the primary spatial and geographic designation referencing their home and work locations. Overall, fragmented municipal control of much of the transportation system appears to permit the abdication for fiscal responsibility of whole system integration of equitable transportation services. In addition to snow clearing discussed above, route computing is difficult between cities, and across urbanized areas within counties, inhibiting access to work, daycare, and other necessary locations. Finally, some people mentioned issues with wheelchair batteries. Public charging that could be used for electric wheelchairs could help.

Perception of Transit

Respondents did not view public transportation as a respected public good or service, but rather as a service for predominantly young, poor, aging, and low-income populations. It was similarly described by members of their social or age cohort. Working toward changing that perception could not only benefit the system now, but also attract more riders for a further benefit.

Transit Amenities

The public transit system does not provide shelters, consistently marked bus stop signage, or other way-finding signs at all stops. These features are particularly important for the new, aging, or impaired transit system user. Increasing the types and formats of information and data accessible to users of mobile devices was requested by many focus group participants across age and income levels. Identifying improved written timetables, maps, and schedules would improve their service experience. Participants used the real-time, arrival, and departure updates supplied, but wanted to also have the same information displayed on all buses in case device failure occurred. Accuracy of timetables was not cited by focus group participants as the major shortcoming in service experience outside of paratransit scheduling, but access, on-boarding, and exiting vehicles were.

Paratransit Service

Ideas for improvements to the technology and communication methods used in the STAR system were a common theme in the focus groups. This included both the certification process as well as the reservation process. One improvement could be some kind of online system to see current status that enables third-party access, in addition to the ability to call STAR staff. Accessible taxis are also desired. Disability empathy training of drivers, dispatch, and the full system of service delivery professionals is also important. When a system failure occurs, people with physical, social, and /or psychological disabilities or other impairments face greater and increased risk to their personal and physical well-being.

Saratoga Transit

During the Schenectady focus groups, younger seasonal employees in Saratoga County and the City of Saratoga Springs noted overcrowded buses, lack of shelters, and onboard conditions that are unsafe. Aging of the population in Saratoga Springs and changes in single and multifamily housing discussed in Saratoga County dovetail with concerns expressed by employees in Saratoga's service sector, which requires younger, non-skilled workers from other areas.

CDTC Equity Task Force

Active recruitment that is a "true" demographic sample of the region's population, transit system users, and municipalities would improve awareness of service delivery gaps. Recruitment should include representatives of professions that service, advocate on behalf of, or interact with transportation disadvantaged users and members of socially marginalized groups. Multi-modal system users who can provide input that directly impacts policy improvements and practices are also important. Cross-municipal input and participation is lacking as well, and would better achieve "total system" transportation planning.

Further Research

A collaborative research team should implement mixed methods participatory research to determine implementable system changes. For example, this project indicated that there are disconnected transportation pockets in urban, suburban, and semi-rural areas of Albany, Schenectady, Rensselaer, and Saratoga counties. A combination of user experience and quantitative data could better identify these pockets and could be visualized in maps to thoroughly assess possible solutions. Moreover, research about the user experience arising from different mobile device usage and communication patterns could lead to recommendations for improved transportation system use by users of diverse mobile devices.