



CROSSING THE DIGITAL AND INCOME DIVIDE: MAKING MOBILITY INNOVATIONS ACCESSIBLE TO ALL

AGRION SMART CITIES SERIES

FEBRUARY 18, 2015

WORKSHOP SUMMARY

SUMMARY CREATED BY:

Susan Shaheen | UC Berkeley's TSRC
Matthew Christensen | UC Berkeley's TSRC
Gerry Tierney | Perkins + Will

SMART CITIES SERIES

This workshop, held on Wednesday, February 18, 2015, was a continuation of the Urban Mobility series held by AGRION, Perkins+Will, and UC Berkeley's Transportation Sustainability Research Center (TSRC). The preceding workshops included:

1. **Evolving Urban Mobility: A New Regulatory Environment** (March 27, 2014)
2. **Urban Mobility Workshop: Public-Private Collaboration and Data Sharing** (June 19, 2014)
3. **Public/Private Urban Mobility Data Sharing: Evaluating Security and Privacy Solutions** (November 13, 2014).

In these previous workshops it was identified that all socio-demographic groups, including low-income and otherwise disadvantaged communities, must be accounted for in developing smarter, safer and more efficient cities. This workshop was designed to address how innovation and transportation development can be framed and adjusted to be more inclusive of all people in an urban environment.

WORKSHOP INTRODUCTION

Gerry Tierney began Workshop #4 by defining the core of this workshop—namely, that we must not develop innovations and plan transportation networks for “winners and losers;” rather, we should plan for a new, inclusive mobility environment for all communities and socio-demographic groups.

Professor Susan Shaheen then provided the context of the workshop in relation to the evolution of the previous events.



A City CarShare vehicle parked in the Bay Area.
Photo: www.spur.org/

She highlighted that the digital and income divide is becoming increasingly prevalent as the smartphone and other technologies permeate into our transportation networks, and we must remember that the public good must come first so that social and environmental goals remain the framework for present and future urban mobility systems.

PANELIST PRESENTATIONS

TILLY CHANG, EXEC. DIR. OF THE SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY (SFCTA)

Tilly Chang, Executive Director of the San Francisco County Transportation Authority (SFCTA) began by offering a public agency perspective on accessibility issues. SFCTA is the transportation authority responsible for long-range transportation planning for San Francisco. Chang noted that the Bay Area has immense challenges related to income inequality, and it's important that we don't exacerbate them with innovative mobility options.



A Bay Area Bike Share user rides adjacent to a MUNI bus line in San Francisco.
Photo: Sergio Ruiz/Flickr

Chang acknowledged existing challenges of San Francisco's transportation system, including crowding and unreliability of the public transit system, safety issues associated with bicycle and pedestrian networks, and the economic and environmental impacts of vehicle congestion, as well as the opportunity for new services to address some of these challenges. She also pointed to the many other travel markets with unmet needs, especially in low-income, minority areas slated for growth. Chang questioned what the role of private services could be in offering mobility solutions.

Chang referenced a 2011 Brookings Study by Martens and Bastiaanssen that proposed a measure of "accessibility poverty" which measures regional access to jobs within a transit travel time radius. As applied to San Francisco, the measure identifies accessibility poverty primarily in the City's western and southern census tracts.

Chang explained Federal Title VI and environmental justice laws that require con-

sideration of the distributional effects of public policies and the provision of appropriate language and cultural access within the planning process. She said that the SFCTA had conducted recent equity analyses on its countywide plans to identify disparities. She highlighted three primary access issues:

1. Bank accounts – 5.7% of SF households are unbanked, and 13.6% are under-banked;
2. Technology – Less than half of low-income Californians have a smartphone; and
3. Information and Access – Low-income ridesourcing (i.e., Lyft, Uber, Sidecar, etc.) users are greatly under-represented in SF.

Chang outlined several areas where collaboration between the public and private sector is needed, including how best to serve low-density neighborhoods and other key markets such as paratransit, after school and late night/early morning trips.

Chang also called for active engagement and collaboration by all parties. The public sector needs to set clear goals, conduct inclusive outreach, and prioritize needs, Chang said, while the private sector should cooperate with data requests and be creative with potential solutions such as pilots

ANTWI AKOM, EXEC. DIR. AND CO-FOUNDER OF THE INSTITUTE FOR SUSTAINABLE ECONOMIC, EDUCATIONAL, AND ENVIRONMENTAL DESIGN (I-SEED)

Following Chang’s presentation, Antwi Akom, Executive Director and Co-Founder of the Institute for Sustainable Economic, Educational, and Environmental Design (I-SEED), posed the question: How are we going to provide safe, smart, shareable, and sustainable transportation for all? Akom believes that the solution lies in democratizing data and decision-making, and expanding the use of digital technology in disadvantaged communities. His team at I-SEED has developed tools to help address these very issues, including Streetwize, a mobile survey and mapping SMS platform that collects local knowledge about cities and services and turns that knowledge into actionable analytics. He equated Streetwize to “The Yelp for public services.”

Akom also argued that many innovative mobility services are not being implemented within disadvantaged communities: “Where the ghetto and barrio end is where bikesharing and carsharing begin.” Expanding the geographic scope of these systems is important, along with understanding how to develop culturally- and community-responsive technology. He noted that it is critical to pinpoint what socio-demographic groups are “being left behind” and to understand why.



Vien Truong speaking at a Charge Ahead California event. Photo: www.greenlining.org/

The Streetwize platform gives planners that capability. Akom closed by explaining that we now have the tools to plan and design systems for the 100% rather than just the 1%.

VIEN TRUONG, DIRECTOR OF THE GREENLINING INSTITUTE

Following Akom’s presentation, Vien Truong, Director of the Greenlining Institute, described the policies and other measures that her organization has helped to advance and implement in California. Truong began her presentation by pointing out that twice as many people die from traffic pollution than traffic accidents and those in poorer communities are disproportionately affected. This was the impetus behind Greenlining’s work on the Charge Ahead California (AB 1275) campaign, which was designed to accelerate the application of electric vehicles (EVs) into equity programs in the bill.

One component of the policy brought together two vouchers to drastically reduce the cost of purchasing an EV for those who need it most. Another component of the bill will help fund EV carsharing in a disadvantaged commu-

nity, and charging infrastructure in multi-unit residential buildings is also able to be funded through the bill. For more information, see Greenlining's publication on this topic: <http://greenlining.org/issues/2015/electric-carsharing-under-served-communities-considerations-program-success/>

Finally, Truong explained that Charge Ahead California has gained traction among other states that are looking to replicate the program, and we can expect similar bills to be passed outside of California in the coming years.

RICK HUTCHINSON, CEO OF CITY CARSHARE

After Truong spoke, Rick Hutchinson, CEO of City CarShare, highlighted some of the work his organization has done to bring carsharing to disadvantaged communities, while also noting some of the challenges in doing so. For instance, in 2006, City CarShare put cars into a low-income neighborhood in West Oakland, and it took six years for them to break even on those cars, which shows some of the business model issues related to where shared vehicles are located. Meanwhile, Hutchinson noted that the public sector pushes social and environmental goals, but often does not offer funding to support the growth of these innovative services into disadvantaged communities. Despite the lack of funding, City CarShare is the only carsharing organization that has a formal program with low-income families. In the coming months, City CarShare will unveil an electric bike-sharing program: "If we get people out of cars and onto bikes, we all win."

Hutchinson finished his presentation by reminding the audience that all of these innovative mobility services are using public rights-of-way to do business, and each service should be working toward advancing the public good and be regu-

lated as such.

OPEN DISCUSSION

Following the panelist presentations, Professor Shaheen moderated the audience question and answer segment. The points of discussion are summarized below:

Q: How can on-demand ridesourcing services (e.g., Lyft, Uber, Sidecar, etc.) connect with individuals in communities that aren't well served by other transportation options?

A: One suggestion was to develop multi-lingual app interfaces, especially in Mandarin and Spanish, and potentially offer subsidized rates for individuals who qualify. Using Streetwize may be an effective means of actually asking this question.

Q: What sort of funding exists for mobility solutions that focus on addressing social equity issues?

A: Apart from Charge Ahead California and cap-and-trade funds, there are not many funding opportunities that are available for long durations of time. One opportunity would be to raise the state or federal gas tax, but at present that seems unlikely. Alternative partnerships between private and public sector entities might be the most realistic means of implementing services designed to address social equity issues.

Q: Is there a definition upon which everyone agrees of "accessibility"?

A: There are several components to accessibility: temporal, geographic, and cultural. Definitions of accessibility are value-based judgements typically made by public agencies, and they can vary considerably among different entities.



A MUNI line stops to pick up passengers in a "transit only" lane in San Francisco.
Photo: Aaron Bialick/Streetsblog

Q: What will it take for innovative mobility services to be expanded into disadvantaged communities?

A: A critical component is funding. To obtain that funding, however, public agencies offering the funding have to understand/believe that a system is going to work if it is expanded into a disadvantaged community. For that reason, additional research is needed to ascertain ways that shared-use mobility and other services can better connect with communities that they have not connected traditionally with in the past.

CONCLUSION

The workshop closed with a recap from Professor Shaheen and an outline of next steps. As data become more accessible through platforms, like Streetwize, and policies support the growth of sustainable transportation systems, like Charge Ahead California, there is clear progress being made. When discussing solutions to accessibility, we must remember that there is no silver bullet, and we must look at an array of tools and options to address this issue.

It was identified from the presentations and follow-up discussion that there

needs to be a better understanding of what underserved communities both want and need. To date, outreach has been relatively limited, being based primarily on public workshops or response to flyers. It was recognized that this is reaching only a limited or self-selecting segment of the community. How do we reach a larger more meaningful segment of the community? Also, how do we best take a more holistic view of the needs of the community? Do communities need mobility options in response to the lack of certain retail, work, or education options in or nearby their community? Does a disadvantaged community have relatively high private auto usage because there are no stores in that community, and if those stores were present what would be the impact on the mobility modes used?

Based upon some of the questions asked above, it is expected that there will be a follow-up workshop or symposiums related to the topic of accessibility and the input of disadvantaged communities. For more information, email Matt Christensen of UC Berkeley's TSRC at: mattchristensen@berkeley.edu.



To view and download selected presentations from the workshop, go to **www.innovativemobility.org**