

DISRUPTING MOBILITY

TSRC, UC BERKELEY HIGHLIGHTS

November 11 to 13, 2015

Cambridge, MA

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The Disrupting Mobility Summit was held at the Massachusetts Institute of Technology's (MIT) campus in Cambridge, between November 11 and 13, 2015. The event was a joint effort of the Transportation Sustainability Research Center (TSRC) University of California (UC), Berkeley; London School of Economics (LSE) Cities of LSE, and MIT's Media Lab. Held over two days, the conference was comprised of keynote sessions, breakout panels, a hackathon, and a poster session. It gathered experts in the urban mobility space from the private and public sectors, including the Deputy Secretary of Transportation, Victor Mendez.

The conference proceedings were inaugurated by Greg Lindsay of the New Cities Foundation, Ryan Chin of MIT, Florian Lennert of InnoZ, Philipp Rode of LSE, and Susan Shaheen of UC Berkeley. Each gave a brief address, putting forth their visions for the summit. Susan Shaheen spoke on the history and evolution of innovative mobility, beginning in the mid-1990s in North America. From the early days of carsharing, the mobility ecosystem now includes many players, such as ridesourcing (also known as transportation network companies or ride-hailing), such as Uber and Lyft; different carsharing, bikesharing, and scooter sharing models; private shuttle operators; on-demand delivery services; and mobile applications that seek to integrate these services.

The first keynote session built on the introductory statements by discussing megatrends in the context of mobility. Nicholas Negroponte from the MIT Media Lab put forth the idea that disruptions do not happen in a particular moment, but rather, they are the result of coincidences. For instance, the invention of the elevator changed the physical form of cities. Dan Doctoroff of Sidewalk Labs framed the discussion in the context of the new age of connectivity and technological advancement. He spoke of more robust mobile data networks, the formation of digital identities, location services, automation development, and how together all of these innovations are reshaping our cities. His organization wants to maintain the chaos of cities and build systems that make density a benefit not a burden. He concluded his remarks by stating that while disruption is leading to better cities for all of us, we must remember that cities are about people, and we should only defend existing institutions that serve the public interest.

The Deputy Secretary of Transportation, Victor Mendez then took to the stage and outlined the federal government's role in the future of mobility. He started by admitting that many solutions to our problems may lie outside of government, but the government must ensure the safety of citizens and also build infrastructure that we can all benefit from. He spoke at length on automation and connected vehicle technology, while listing examples of their adoption in highways and public transit systems from Arizona to Florida. Kent Larson from the MIT Media Lab concluded the session by predicting that the future will combine automated technology, vehicle sharing, and electrification. He stressed that cities enable density, proximity, and diversity. He reiterated the common theme that cities are for people and not machines.

The panel "Social Trends Disrupting Mobility," moderated by Susan Shaheen of UC Berkeley, discussed generational differences, lifestyle shifts, and social technologies that are enabling various mobility disruptions. Tony Dutzik from the Frontier Group listed some current social trends, such as people getting married later in life and having greater debt. He also discussed how people are moving back to city centers as these areas undergo a renaissance. Colin Hughes from the Institute for Transportation & Development Policy (ITDP) explained that mobility disruptions are now reshaping the way we think about public space and resources, as previously under-valued resources get monetized. Paul DeLong from car2go gave a personal account of his deteriorating quality of life due to his long commute to work everyday. He framed the debate on mobility in the context of improving people's lives in real, tangible ways. Erika Young from T4America added that as people move back to city centers, so are jobs as their markets are shifting. Zack Wasserman of Via discussed innovative on-demand transportation services in New York City. Also on the panel was Shomik Mehndiratta of Uber. He began his remarks by stating that America was changing, and people should use services, like Uber, to understand those changes rather than blaming the service for the change itself. He proposed that services, such as Uber, could become auxiliary wings of a core public transit line where it is not cost effective for the government to provide the service. He noted that governments might provide subsidies to low-income users, so they could afford on-demand mobility services. This led to a heated discussion about data sharing between the public and private sector.

The next session addressed the implications of mobility disruptions on cities and urban planning. One example mentioned the "Airbnb phenomenon," which is monetizing existing assets like housing in the same way peer-to-peer carsharing and ridesourcing are doing with vehicles. In this context, it was noted that these services did not change the societies that they were deployed into, rather society has evolved into an "access over ownership" paradigm. There was not necessarily agreement on stage, as one panelist attacked Uber, calling it a "socially corrosive entrant" that bears no risks and sheds costs onto consumers and drivers. This was stated in the context of the loss of a life involving an Uber vehicle in San Francisco; this speaker felt that Uber was not taking responsibility. The larger point made through this discussion was not to blame technology. Society can design technology compatible with our deeper values that can shift from potentially being engines of structural inequality to social justice engines.

Carrying forth the theme of social justice, another session titled “Access & Mobility to Cross Income, Digital, and Land Use Divides,” was moderated by Gerry Tierney of Perkins + Will and focused on mobility pertaining to low-income, older, disabled, children, and zero vehicle households. Tilly Chang of the San Francisco County Transportation Authority emphasized that the government must ensure that as we grow, we grow in an equitable manner, giving several examples from San Francisco. Matt Caywood of Transit Screen explained how his company was providing transportation information to people who are without a smartphone or for whom English is not their native language. He shared that in his experience, working directly with cities had proven to be both efficient and fruitful. Jeffrey Maltz represented SilverRide, a transportation service designed for older adults. He said that his service was having a tangible impact on those with limited mobility and those who can no longer drive. Douglas Shinkle from the National Conference of State Legislatures discussed the legislative side of the story, where the biggest issue was the regulation of ridesourcing. Jenny O’Brien from Hopista, a hitchhiking service, and Ryan Johnson of Enterprise both spoke about steps their companies have taken to improve access to mobility. It was noted that the claim that the poor do not demand better services or are not willing to pay for them are myths, as late night workers often pay for safer mobility, and low-income people in Los Angeles frequently pay for access to high occupancy toll lanes. This reality, the panelists said, can help reframe the debate on mobility for all sectors of society.

One of the highlights of Day Two of the Disrupting Mobility Summit was the panel titled: “Mobility and the Sharing Economy.” Moderated by Timothy Papandreou of the San Francisco Municipal Transportation Agency, this session discussed the role of technology in enabling the redistribution of excess capacity for the benefit of others. Papandreou began his remarks with the current context in which sharing makes sense—80% of single occupancy vehicles are empty, cars are stationary 95% of the time, and this asset is 100% owned. Further, he pointed out that the concept of mobility had changed, and people are now inextricably tied to their smartphone. Thus, there is a great opportunity for improving the commuting experience and integrating different modes with the help of the smartphone. He said that a choice now exists between owning your own transportation or accessing shared services and a whole menu of options. This would require, however, a more integrated and collaborative approach among stakeholders. He claimed that there was the potential to reduce private auto use by 15 to 30 percent with the help of shared mobility.

This discussion then switched to the panelists. Amanda Eaken from the Natural Resources Defense Council presented the staggering figure that 40 percent of families at the poverty level own two vehicles, and household transportation can cost upwards of \$25,000 per household. Matt George of the microtransit operator, Bridj, made the point that in the face of declining levels of carpooling in the U.S., unorthodox solutions are required. His dynamic, tech-enabled vanpool/jitney service is doubling its ridership every 2.5 months and is planning on expanding to Kansas City. Bob Burns from BCycle outlined the growth and potential for further expansion in bikesharing in the U.S. He cited various examples, such as the \$15 unlimited student BCycle pass in Fargo and the joint fare card for bikesharing and public transit use in Los Angeles. Emily Castor of Lyft mentioned that talks are underway between Lyft and public transit operators to

explore areas for collaboration. She pointed out that while there is enormous value in data for planners and in allowing user surveys, sharing data is challenging because it is a competitive landscape for operators. Justin Holmes from Zipcar noted all the ways individual car ownership has embedded us into our current mobility systems, and carsharing can play a powerful role in cities. Finally, Steve Carroll of RideScout spoke of the importance of mobility aggregators in providing access to the whole menu of operators for the end user, along with mobile payment.

The closing remarks for the summit were presented by Kaye Ceille, President of Zipcar. She tied together all the services described during the conference by stressing a central theme: “convergence is here.” While the interplay of innovative mobility services, such as carsharing, bikesharing, microtransit, and ridesourcing, is playing a role in reinvigorating cities today, Ceille predicted that automated technology will be the future, and Zipcar will be a leader in its adoption.

To summarize, the Disrupting Mobility Summit saw important players from a wide variety of transportation sectors come together to talk about innovations that are taking place and how those might diverge from the way things have been done, to date. As technology continues to expand and develop, this space is rapidly changing and thus more gatherings will follow to foster this ongoing evolution.