

Electric & *SHARED MOBILITY*

HUMANS OF NEW MOBILITY SERIES

Report



SIEMENS

October 2022

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CONTEXT

Curated by Urban Movement Labs (UML) and sponsored by Siemens, Humans of New Mobility is an event series that gives voice to the diverse users, providers, and creators of new mobility in California and worldwide. From a community advocate to an entrepreneur to a public official, speakers and attendees represent the next generation of transportation innovation. We invite event partners to co-create this community setting the narrative for the future of mobility in Los Angeles and all around the globe.

The goals of the event series are:

- Engage the general public in dialogue and education about new mobility.
- Empower the residents most affected by the cities' transportation decisions.
- Generate outcomes and insights from these workshop events.
- Create a platform to educate and inform the public and facilitate conversations.

The new mobility industry can help us build safe, sustainable, and equitable cities. Still, we have to do it right, and the only way to do it right is to discuss this revolution in urban transportation with a diverse community of stakeholders. Currently, there is not much space to discuss these ideas. This series of events aims to build a platform for dialogue between communities, businesses, and authorities and detonate proactive participation and links between them.

All in all, Humans of New Mobility is not a typical webinar series or in-person panel discussion. Instead, the UML team crafted thoughtful participatory tools where all attendees have an opportunity to share their ideas on the future of transportation.



Humans of *NEW MOBILITY SERIES*



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ELECTRIC & SHARED VEHICLES Virtual Workshop

Simply substituting internal combustion engines with electric cars will not solve our urban mobility challenges; cities can't end car dependency without building shared-multimodal systems. The e-revolution also includes alternatives such as e-bikes, e-transit, and e-scooters, which can help us build shared-electric-multimodal cities. This event focused on how all types of electric transportation can help us build a multimodal city to reduce miles of single-occupancy trips by car, whether electric or not. The [complete video](#) of the virtual workshop is available on our YouTube channel.

Julia Thayne DeMordaunt, UML Board Member and Principal at the Rocky Mountain Institute, was the moderator of the Electric & Shared Vehicles Virtual Workshop. UML invited a diverse group of panelists to share their perspectives on shared and electric mobility:



Veronica Siranosian, AICP
Vice President, Digital
Innovation, AECOM



Moderator,
Julia Thayne DeMordaunt
Principal of Urban
Transformation, Rocky Mountain
Institute



Alejandra Alvarez
Project Manager, Los
Angeles County Bicycle
Coalition (LACBC)



Michael Samulon
Director of Vehicle
Electrification,
City of Los Angeles



Robin Chase
Founder, New
Urban Mobility
Alliance (NUMO)



Nand Kochhar
Vice President, Automotive and
Transportation Industry,
Siemens

The event was free and open to the public; 265 people registered, and 143 attended the Zoom Webinar. Of those, 30 attendees participated on the Miro digital whiteboard. Likewise, 42% of the 143 attendees reported being based in Los Angeles County, 4% in San Diego, 4% in New York City, and 3% in the Bay Area; the rest came from Princeton, Seattle, Sacramento, Detroit, Chicago, Madison, and Omaha. While 98% of the attendees were based in the US, there were participants from Germany, South Africa, and Canada.



HUMANS of New Mobility Series



Electric & SHARED MOBILITY

Join us for a virtual workshop

September 29, 2022 | 12 – 1 pm

We can't end car dependency without building multimodal systems. The e-revolution also includes alternatives such as e-bikes, e-transit, and e-scooters, which can help us build shared-electric cities.

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MAIN TAKEAWAYS

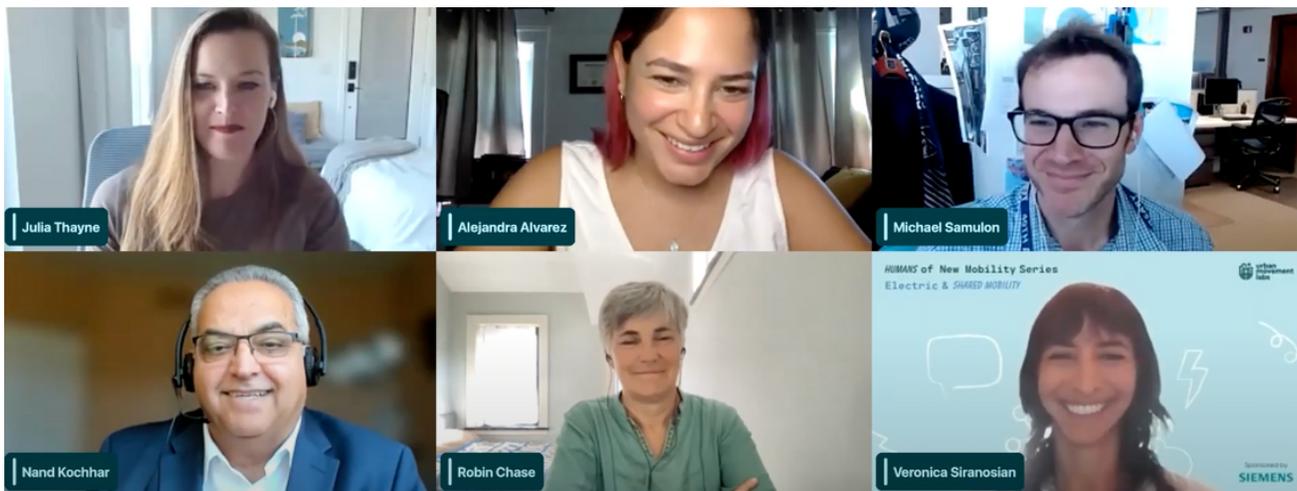
from the Panelists

The virtual workshop was divided into three sections: the shared mobility discussion with Robin Chase and Veronica Siranosian; the electric mobility panel with Michael Samulon, Alejandra Álvarez, and Nand Kochhar, and the Q&A session with final remarks from the panelists.

Shared Mobility

As the moderator, Julia Thayne DeMordaunt, facilitated the first section by asking Robin and Veronica the following questions:

- Electric vehicles are gaining attention and significant investment from the private sector and the government. When should we promote privately-owned vehicles, and when should we encourage shared mobility?
- Using shared mobility implies choosing the right vehicle and mode for each trip. What lesson might we learn from this as we consider electric vehicles and electric mobility?
- What are the consequences of supporting EVs without considering a shared multimodal approach?
- How can the electric and shared mobility revolution help us reduce car use and the wasted space on parking lots?



Moderator Julia Thayne DeMordant and all panelists during the Electric & Shared Vehicles Virtual Workshop

Veronica started mentioning the promise of shared electric mobility to support equity, especially gender equity. She cited [research by NYU](#) on how bike-share is an opportunity to meet women's travel needs. She also mentioned a [Populus study](#) where low-income people reported that they prefer dockless e-scooters to bike-share systems requiring a subscription. Robin's opening words highlighted that new transportation technologies are disrupting cities worldwide, which is an opportunity to actively discuss with communities, businesses, and regulators. That's how Robin co-founded the New Urban Mobility Alliance (NUMO) to pull together all stakeholders in the transportation innovation space toward livable, sustainable, and just cities.

Robin stated that the future of transportation must be shared before electric. Because promoting shared mobility builds multimodal and resilient cities and provides much more access. On the other hand, if it is not shared, buying and maintaining your own vehicles could be expensive. She recognizes that electrification is critical for air quality and a sustainable future, especially if we promote electric buses and trains. She finishes by saying: "The larger transformative power in terms of quality of life in cities has to do with shared mobility and minimizing the number of privately stored cars on our streets." Julia summarizes this intervention by saying that "shared mobility is the transformative piece of the puzzle."

Veronica supports the idea that what we always need to promote is shared mobility. She cites the [National Travel Highway Survey](#), which states that in the US, almost 60% of trips are less than 6 miles, a massive opportunity for shared mobility. Then she mentions that in Los Angeles, residents rely on cars to access more job opportunities, according to a [study by UCLA](#) by Evelyn Blumenberg. So, while we build a better high, capacity shared transit system, programs such as Blue LA Blink, the electric shared cars system in Los Angeles, can help residents to access opportunities. Robin added that we need to think of cities where we can access jobs on a 30 min walk, a 30 min bike ride, and now a 30 minutes e-bike trip, which opens more possibilities.

Julia mentioned that privately owned electric vehicles receive more public and private support than shared mobility. Then Julia asked about the consequences of investing in electric mobility without considering shared mobility. Robin answers that the trend to invest in electric privately owned vehicles is regenerating old aging fleets and rejuvenating the auto industry, and giving them a heft for the next 15 to 20 years. "I found it disappointing and not a great start to address equity and sustainability issues; I'd rather prefer people to continue using their own [old] personal fleets while we amplified the numbers of ways to get around," Robin said.

“Our job is to maximize mobility freedom and mobility choice,” said Veronica, talking about behavioral matching instead of focusing on behavioral change. She shared the example that, as transportation planners, we think that a shared bike station between transit lines could solve the problem, but the reality is that people need more options, such as vanpooling or car-shared systems.

Robin continues by saying that infrastructure is destiny, and how we build it determines our mobility options. She claims that we used to have a human right to mobility; we used to walk to all our essential services, and now we need a new infrastructure that helps us afford access to those destinations.

Robin finalizes the panel stating that land use is critical. She shared a study where they found that ZipCar, a car-sharing company, replaced 16 private vehicles. She invites us to imagine what we can do with all those parking spaces, cheaper housing, public spaces, and cafes.



Robin Chase's no-profit New Urban Mobility Alliance (NUMO) established the "[Shared Mobility Principles for Livable Cities](https://sharedmobilityprinciples.org)".

Source: sharedmobilityprinciples.org

Electric Mobility

For this section, Julia asked the following questions to Alejandra, Michael, and Nand:

- How might we prioritize equity considerations in planning EV charging infrastructure?
- How could vulnerable communities benefit from EVs?
- How do you imagine the future streets where different electric vehicles coexist?

Alejandra starts explaining the Los Angeles County Bicycle Coalition (LACBC) e-bike pilot program, carried out in heavily polluted neighborhoods of Los Angeles without bike-shared systems. LACBC invites small businesses and delivery persons to try e-bikes, and so far, the community is experiencing the benefits of this program. Alejandra states that the ultimate goal is that they can own their e-bike at an accessible price once they already see the value. Next, Nand from Siemens shares how the company offers software solutions to enable electrification from trucks to e-bikes. Finally, Michael shared the work of the City of Los Angeles regarding the electric infrastructure for all types of vehicles, the Blue LA Blink shared-electric car system, and the Universal Basic Mobility pilot of Los Angeles.



Los Angeles Walks, Safe Streets Promotores and LACBC team at an E-bike Safety Training
Source: la-bike.org

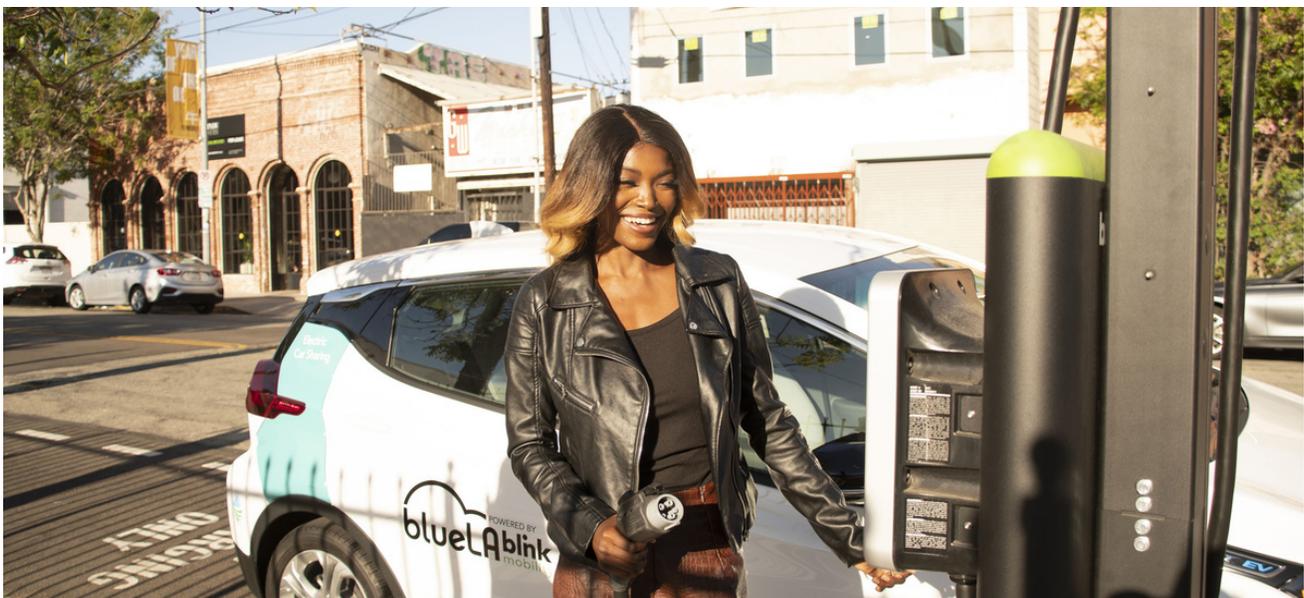
"Once you get on a bike, you realize how vital infrastructure is in improving your quality of life," Alejandra said. That way, people are more aware of what type of infrastructure they can support and advocate. Then Julia shared the experience of the City of Denver, where the city is giving e-bike vouchers so people can buy them. As a result, people are using those private e-bikes and using more shared micro-mobility options.

Michael explained the program of the streetlight curbside EV charging program, probably the first in the country, now with approximately 600 level 2 chargers around the city. In his words, it is an excellent first step, quickly deployable and focused on areas with greater need. Also, he shared that the Blue LA Blink program is expanding.

Next, Ale explained how the e-bike pilot works, starting with a course of safety tips to help the participants become familiar with e-bikes. They are saving money and coming from low, especially now that gas prices skyrocketed. Health benefits are tangible; cleaner air transportation is one step towards protecting the community.

Michael mentioned that the City needs help from advocates and non-profits. The cities will not change without significant noise from outside, which is critical. The business side is essential for solutions, partnerships, software, and hardware components. He stated that companies like Siemens could help us with software and hardware components to get where we want to go to a less car-centric city.

Nand finalizes the panel claiming that the transportation revolution is now human-centric instead of just going from point A to point B. He envisions a multimodal approach and explains that no single company or organization can solve this problem alone; "we need partnerships to move people and goods with sustainability in mind."



Blue LA Blink is the electric car shared system of Los Angeles
Source: arb.ca.gov

MAIN TAKEAWAYS from the Attendees

Q&A

We received six questions from attendees. We answered one via Zoom's Q&A functionality, and then Julia tried to ask a final thoughtful question to the panelists taking into account the remaining five questions. Julia's question was: how do we build coalitions to build multimodal roads?

Alejandra proposed to get the community involved, and she shared the example of the LA Walks "promotoras" program because who better to engage the community than the community itself? Then, Nand proposed to overcome any resistance to building multimodal roads with the help of elected officials and make it part of the ballot. Next, Veronica suggests elevating the benefits of infrastructure, such as economic and health benefits. Michael supported Veronica. Finally, Robin proposes considering the teenagers who cannot drive and the parents who need to move them around. If we have multimodal roads, teenagers will have mobility freedoms, and parents can rest.

Miro Digital Whiteboard

The UML team invited all attendees to participate on a digital whiteboard with critical questions to answer about the future of shared and electric mobility. Of the 143 attendees, 30 participated on the [Miro board](#). We posted four questions, and we received 88 interactions in total.



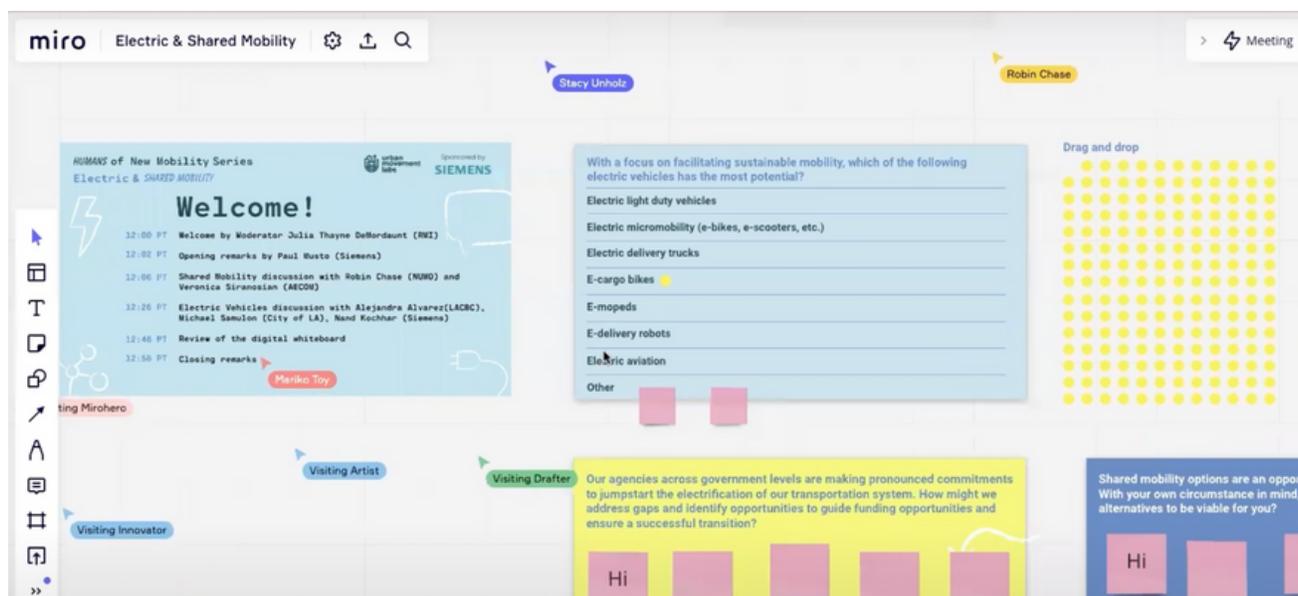
Thirty attendees participated on the Miro platform. The complete digital whiteboard is available at: bit.ly/newmobilitymiro

The first question was a voting system where participants answered the following: “With a focus on facilitating sustainable mobility, which of the following electric vehicles has the most potential?” In the first place, there was a tie between electric micromobility and e-cargo bikes with sixteen votes each. In second place, with five votes, electric delivery trucks won. In third place, the poll had a tie between e-mopeds and e-delivery robots with two votes. Finally, the board got one vote for light-duty electric vehicles, one for electric aviation, and one for highway-capable 100% electric short narrow-track vehicles.

The second board posed this question: Our agencies across government levels are making pronounced commitments to jumpstart the electrification of our transportation system. How might we address gaps and identify opportunities to guide funding opportunities and ensure a successful transition?

This board got twelve sticky notes with different ideas. A participant highlighted the importance of working with local advocacy groups that understand microdynamics, especially in communities unable to realize a transition to sustainable modes. Another attendee expressed the importance of deploying e-buses with exclusive lanes and ensuring bus drivers receive a fair salary. Likewise, one comment expressed that authorities must prioritize electric transit and delivery vehicles. Some participants underscored urban planning policies that facilitate the transition to e-mobility, such as zoning, parking, density, and curb management. Finally, a couple of participants expressed concern about affordability and interoperability and how to manage the waste of batteries.

The third board presented this question: Shared mobility options are an opportunity to replace private vehicle trips. With your own circumstance in mind, what is needed for shared mobility alternatives to be viable for you?



This screenshot shows the participants' mouse cursors exploring the Miro platform.

This board got nineteen comments, starting with participants' concerns about having access to safe and reliable options such as fixed rail. Another participant talked about first-and-last-mile weather conditions to walk safely from home to their destinations, especially with kids. Likewise, four participants stated that safe conditions are critical to use shared micro-mobility, such as protected lanes and traffic calm devices. One participant claimed that suburban sprawl communities need a unique approach to provide shared-mobility options. A couple of comments expressed that shared mobility, specifically public transit, needs more frequency and coverage to be a more attractive option than private travel. There was also a comment on the importance of promoting cargo e-bikes for moving goods & people. Finally, one attendee underscored coverage, the number of stations, and more alternatives as key to shared mobility success.

The fourth and final board presented this question: City streets are a finite and scarce resource. Programs like dining al fresco have helped reimagine how our streetscapes are used. Is shared mobility an opportunity for communities to reimagine streetscapes away from car dependency? If so, how might we work with communities to accomplish that?

This board received thirteen interactions, starting with the importance of community engagement to plan the future of our streets. Four participants highlighted how addressing location-specific needs is critical to redesign roads for everyone. Then, three attendees expressed that infrastructure is key to welcoming shared mobility, such as protected bikeways, micro-mobility facilities around public transit stations, and distinguished lanes for all types of shared mobility. One participant expressed that shared mobility is usually thought for single young people, not families with kids. Finally, a participant commented that on-street dining is a way to privatize public space and posed the question of how we have more public space that isn't driven by capitalism.

HUMANS of New Mobility Series

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NEXT STEPS

The Electric & Shared Vehicles Virtual Workshop was the first event of the Humans of New Mobility series. UML aims to organize two more virtual workshops and one in-person event. The respective concepts for those events are: Advanced Air Mobility is on the Horizon, The fate of Freight, and New Multimodality. UML aspires to craft a platform that links communities, businesses, and authorities and empowers the residents most affected by the cities' transportation decisions. In a few words, the new mobility wave is a historic opportunity to build safe, sustainable, and equitable cities only when everyone has a voice to create these policies.

The UML team will continue to organize and host this space to discuss the future of our transportation systems. Additionally, UML will incorporate the main ideas from these workshops into policy recommendations and pilot projects. Finally, thanks to our panelists and participants of this first webinar, we learned several lessons summarized below:

- Shared mobility is the transformative piece of the puzzle. If we want to build a multimodal city and reduce miles of single-occupancy trips by car, the future of transportation must be shared before electric.
- The goal is to maximize mobility freedom and mobility choice. We must focus on behavioral matching instead of focusing on behavioral change. That way, we can address the specific needs of communities.
- Working with communities is essential to address location-specific needs. If we share the benefits of new mobility with residents, they are more likely to support the construction of multimodal roads. The e-bike pilot by LACBC is a fantastic example of how we can work with communities.
- Infrastructure is destiny, and how we build it determines our mobility options. It is critical to building coalitions to build safe multimodal roads such as protected bikeways and traffic calm devices.
- Shared mobility devices must consider all types of users, especially vulnerable residents such as families with kids, people with disabilities, and older adults.
- Public transit is the backbone of shared mobility. We need more access, frequencies, and an affordable public transit system.

WE THANK ALL THE ATTENDEES, PANELISTS, AND PARTNERS THAT MADE THIS EVENT POSSIBLE

Acknowledgements

Thanks to all the panelists and the moderator:

- Robin Chase, Co-founder of the New Urban Mobility Alliance (NUMO) and ZipCar
- Alejandra Álvarez, Project Manager at LACBC
- Michael Samulon, Director of Vehicle Electrification and City Projects at the City of Los Angeles
- Veronica Siranosian, UML Board Member and Vice President, Digital Innovation at AECOM
- Nand Kochhar, Vice President, Automotive and Transportation Industry at Siemens Digital Industries Software
- Julia Thayne, UML Board Member and Principal at the Rocky Mountain Institute,

Our deepest gratitude to the Siemens team that made this event series possible.

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This events series boosts our partners' visibility and connects them with communities, authorities, and private companies working on the new mobility industry. For future engagements, please contact Urban Movement Labs.



Urban Movement Labs

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Urban Movement Labs is a 501(c)(3) public benefit corporation with the purpose of charitable and educational benefits for the community. Urban Movement Labs provides a third space for collaboration, which prioritizes a community-first approach for local agencies, communities, and companies, to co-create and co-implement mobility solutions.