



Movement Matters is a series of inspirational thought leadership events exploring new ideas about places, people and economies. Drawing on experience from leaders from around the globe, these sessions provide a burst of fresh thinking. To attend any of our events register at: [www.steergroup.com/events](http://www.steergroup.com/events)

# Event summary



## SESSION 3: Communities

Globally, there are a wide range of hurdles that prevent people from accessing greener lower carbon forms of transportation. However, barriers are particularly high for people on low incomes or who come from otherwise disadvantaged communities. Often these individuals are also disproportionately affected by the impacts of climate change. On the third day of 2022 Movement Matter series webinar we cover two key questions:

- How can a fair transition to clean transportation be made possible?
- How can policy and decision-makers encourage and facilitate this transition, especially among disadvantaged or underserved communities?

As behavioural change at an individual level is required to reach Net Zero goals, it is crucial for transportation agencies to ensure community engagement and participation and adapt as this change happens; leaving space for innovative solutions to cover the specific needs of communities.

Crucially, the incorporation of appropriate incentive programs and funding of a variety of sustainable transportation options can also encourage adoption of lower carbon modes, especially in underserved communities, where access otherwise could be limited.

**Alia Verloes**, Steer's North American New Mobility Market Lead, guided the discussion on challenges and levers of action for achieving adoption of cleaner transportation modes; from a local, regional and state perspective with a focus on the needs of disadvantage communities.

Alia was joined by **Bree Swenson** from the California Air Resources Board who shared great examples of funding programs for disadvantaged communities in California. Alongside was **Caitlin Vargas** from Lane Transit District in Eugene (Oregon) who highlighted the importance of working with the community to find the best suite of sustainable transportation options, and **Michelle Go** from Metropolitan Transportation Commission in San Francisco, who shared examples of shared mobility incentive programs to reach regional Net Zero goals and early adoption in disadvantaged communities.

## Summary

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In the push to achieve decarbonization goals, agencies face multiple challenges in the deployment of zero-emission transportation alternatives. However, as the effects of climate change mount, so does the urgency to ensure equity and inclusion while pursuing solutions.

One of these challenges is how to identify an appropriate suite of solutions that are tailored to the needs of the local community. This is of particular relevance for low income and disadvantaged communities, where specific strategies need to be in place to overcome some of the financial barriers.

The panel identified a number of challenges for accessibility to clean transportation, the first challenge is to find sustainable alternatives for a built environment that have been predominantly for passenger vehicles; tied to this is the need to generate behavioural change to cleaner alternatives. To overcome these barriers, public outreach, education and active participation of the community has been a key lever for the early adoption of alternative lower carbon modes. Sustainable transportation has been found to be most effective and attractive when transformation has been led by the community. One example is in rural areas, where exploration with the community identified electric on-demand micro-transit shuttles as a more effective alternative to frequent fixed-route electric bus services.

The panellists recognised that radical change to people's everyday lifestyles and mobility had arisen from the pandemic and that the change will continue. As new technology is available or new solutions are deployed, people's behaviour and use of transportation will need to continue to evolve. The solutions for use and promotion will be different now and medium or long-term. Therefore, agencies will need to be creative and agile to respond, with flexibility key for achieving adoption of sustainable transportation.

Comprehensive solutions in communities will provide a wider range of alternatives for users to cover their transportation needs, and ultimately accelerate adoption. The panel agreed that funding and sponsorship from government agencies should be allocated in multiple fronts, e.g., ZEV initiatives alongside tree planting as a pedestrian infrastructure enhancement. Also, understanding that investment is also required in the "boring but essential administration and technical platforms" as these will make the wider investments more resilient to change. One example is the Clipper Card platform in San Francisco's Bay Area that started to manage a discount program for four transit agencies, now extended to 21, and now covers an e-bike discount program, removing the administrative burden from operators.

A key element that has been successful for incorporation of ZEVs in low-income and disadvantaged communities is closing the cost barrier. Funding upfront costs for zero emission vehicles or e-bikes have shown successful results in the Bay Area and other communities in California. The source of these funds in the USA usually come at Federal and State level, and has been growing over the past years, but also interest in investing so access to these funds have become extremely competitive. Funding and allocating correctly these resources are even more important in disadvantaged communities, as user pay policies are unattractive and infeasible.

## Q&A

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### **AV: What are some of the key barriers to make clean transportation accessible to more people?**

BS: The relationship between transportation and land is important. i) Historically, single occupancy gas vehicles have garnered most land use investments. In California, the Sustainable Community Strategies is used to shape land use through a Vehicle Miles Travelled (VMT) reduction lens. ii) Expanding and maintaining clean transportation will require investment shifts, both monetary and staff resources. iii) To build projects that efficiently use resources, we have involved communities from early planning stages, earning trust by involving community groups.

CV: i) Battery technology is still limited, and we have faced specific challenges with charging electric high frequency bus service quickly enough to maintain frequency. ii) We have also seen some resistance to mode shift. We are helping constituents rethink clean transit options and their diverse benefits through creative marketing and testimonials.

**AV: What are the key levers of actions to secure equitable access to new vehicles, services, and technologies?**

CV: Communities involved in clean transit projects are more interested in adopting these solutions. We create dialog with public engagement sessions where we give facts about projects and listen to the lived perspectives and challenges of the community. With our electric bus project, we gave opportunities to get to know the technology before we listened to their concerns, driving a bottom-up approach.

**AV: Could you share with us some lessons learned from both successful and unsuccessful clean mobility programs?**

BS: Personal vehicles incentives are also effective: (1) scrap and replace programs, (2) financing assistance for people with low credit scores, (3) low interest loans for electric/hybrid purchases, (4) CARB's STEP program

After analysing the results of CARB's car-share project, it did not reduce VMT, but it did convert trips from regular vehicles, to electric. Equally as important, it gave constituents access to other type of trip purposes like medical appointments.

As we add more electric vehicles to the roads, there is a simultaneous need to invest in the electric grid.

**AV: Considering that community rollouts cannot be considered with one generic approach, what are the strategies/actions that should be prioritized to trigger transformative change among the communities across your jurisdictions?**

BS: The California Air Resources Board (CARB) collaborates with employers to incentivize clean commute programs like mode change, park-n-ride, storage, charging stations, etc. Flexibility as well as community collaboration, are necessary to account for the diversity of needs.

MG: Administrative platforms have helped MTC facilitate incentive programs more efficiently. For example, riders can apply for 20-50% discount through our Transit Fare Discount Program. 21 different agencies are involved in the project, and each can sign-in without the administrative burden, freeing resources for other projects.

**AV: Question for Michelle What are limitations with respect to the use of E-bikes?**

MG: E-bikes are much more accessible across gender, age, etc. than traditional bikes, so the need of a wide population needs to be considered. Supply chain and financial challenges brought by Covid have limited access to E-bike. To combat financial barriers, and guarantee access MTC offers E-bike vouchers.

**AV: Are you only looking at marketing/soft policies to change behaviour, or are you considering regulation/pricing mechanisms to 'force' people to change behaviour?**

CV: There is no need to force behaviour change, collaborative projects developed alongside communities are most successful and optimize tax-payer's dollars.

BC: Clean car regulations have been essential for reaching decarbonization goals including (1) 100% of vehicles sold in California by 2035 must be ZEV (2) or congestion pricing.

**AV: Can you comment on the split between federal funding programs, state level programs, and user pay policies?**

BS: Projects often require multiple funding sources. The biggest investments come from the federal level, but the State investments have grown over time. While funding is available, and pots are growing, interest in programs is increasing, meaning funding is competitive.

In disadvantage communities, user pay policies are unattractive and infeasible, given the context. Most programs are free and require external funding.

MG: Community Choice Aggregators (a local, public electricity provider that makes energy procurement decisions) is developing an e-bike and clean vehicle initiative program. Regional transportation tax measures have the power to drive GHG reduction goals, TDM programs, and more.

**AV: Do you do other analysis about the distribution of costs and benefits of all policies to determine who should receive more incentives or investments?**

BS: All the communities we work with are considered disadvantaged and low-income and, therefore, are all a priority for investments.

## **Conclusion**

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Globally governments have established ambitious goals to mitigate climate change. In the transportation industry, the most common trend is to migrate to zero emission mode alternatives. However, there are multiple alternatives to reach this goal and in order to be successful, solutions need to be tailored to the specific needs of the community. Therefore, community participation is vital to devising appropriate solutions and this participation needs to be actively created not just expected.

Alongside public outreach, early examples have shown the importance of powerful storytelling and practical experience/visibility of the technologies to encourage adoption. It is paramount to show that sustainable alternatives are not only beneficial to the environment, but they are also practical, accessible and convenient modes of transport.

As ZEV technology evolves, it is also key that transit and funding agencies are flexible and adapt as consumer choices continue to change. For example, the COVID-19 pandemic caused transit ridership to plummet; but at the same time, alternative modes (such e-bikes) caught consumers attention, which allowed successful deployment of e-bike programs.

Finally, as ZEV technology is new, it is usually inaccessible for underserved and underbudget households and communities. In order to reach net zero goals, it is likely to be necessary to incorporate funding programs and incentives to cover upfront costs and accelerate the adoption. Furthermore, this funding should cover a variety of community-specific transportation options.