New Mobility Mindsets: Shared Mobility and Personal Micromobility

Webinar Questions and Answers

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Question and Answer Session

Which entities should be investing in infrastructure for shared mobility in your opinion? Public agencies, Transportation Network Companies (TNCs), or private economic development and finance corporation providers?

Brian Holland: I don't think it's necessarily any single type of entity where the responsibility lies there. I think when you look at investments in infrastructure who yields the benefits of those? There's the public good that can be derived from new infrastructure and in that regard it does make sense for cities and other public agencies to be upgrading facilities. So if we look at the example of micromobility, as Karina was suggesting, so many of these trips are even under a mile. Many of them would be great candidates for e-bike share, scooter share. But even in places where those technologies have been introduced, sometimes you're not seeing that mode shift or that utilization because folks have safety concerns and that can be specific to the type of community where they've seen underinvestment and street infrastructure for too long. So there are public benefits from shifting more people to bikes and scooters in terms of congestion, in terms of emissions, and if better bike facilities are part of the key to unlocking those benefits, then absolutely. I think cities should be making those investments. At the same time, the companies operating these services also benefit from greater utilization and it makes sense for them to contribute as well. I guess as long as we're talking about micromobility, there are many cities that have introduced permit programs to allow them to operate in the right of way. And many of those have fees associated with them and that can be a way that companies contribute towards development of new infrastructure, and that seems equitable to me. I think that makes a lot of sense. Yeah. I guess that's my kind of high level take.

Anita Tang: For who should be investing, I would think it's really depending on your governing bodies. If the proper agency has staff and the resources to invest in this infrastructure, I think that would be easier.

Janna Smith: I think that's why we've been going after grants and making sure that we are providing the services in other shared mobility services as well. We're still continuing to prioritize investing in our metro bike share, things like that.

Anita Tang: For the private electric vehicle supply equipment (EVSE) providers, I think it's really how you put that contract in. Every city or every entity would be different. I think if you have the staff and the resources it would be easiest for a government to invest in and also govern it.

Karina Ricks: I think obviously the facilities and building the actual—I think having safe, inviting travel facilities is critical to move that shift. We hear a lot here, I'm sure other places do too, that I would never bike on one of those streets. And those bicyclists are all lawbreakers and whatever else. A lot of the time that is because they're trying to position themselves into the safest place on the street or trying to do other kinds of things. So building those facilities is critical to moving a larger share of the population into alternative modes for those short distance trips. Building and maintaining the right away is absolutely a public responsibility. That's our side of the equation. We are working closely with both public and private partners, the service delivery side of that and investing in that portion of it.

Are you finding that there is resistance to the idea of shared mobility or are folks sticking with it after the initial try? What are the primary motivations that are driving people to transition to these shared services?

Brian Holland: So there are definitely folks along the road in terms of acceptance. But I think for the most part we've seen tremendous growth in a lot of these modes over the past five years or so. And so for the most part I think the market is really changing and people are changing their travel behaviors. It depends in part community by community and what works in different places. But for the most part, we've seen increases in utilization of bikes and scooters in most places, and particularly in places where cities are ensuring that folks still safe. Again, I'll make another plug for those types of bike lanes and other facilities. Places where they're starting to restrict car access on certain streets in order to give more space to those active modes, we're seeing a lot more utilization. There are still concerns about as far as micromobility, concerns about safety, about clutter, and visual issues in the sidewalks and that type of thing. But in a lot of cities, they're starting to really get a handle on the regulations around those topics and seeing less challenges in some of those areas. I feel like at least anecdotally it seems like a lot of those concerns have died down a little bit. But regardless of the acceptance, I think a dynamic that we just really have to stay laser focused on is how these modes and services are affecting transit ridership and the ability of transit agencies to do their job. It's great if there are certain folks who can afford to use these services or who live in communities where they're available, but there are a lot of others that can't. And they rely on transit. We have to maintain those high standards and service levels and not get distracted by the shiny, new thing.

Karina Ricks: I would echo many of the same comments. In the Commonwealth of Pennsylvania we are literally sort of a tale of two cities. In Pittsburgh because of some of our topographical challenges, because we do not have a grid network access challenges exist. We are really open to and willing to look at some of these micromobility options as a way to fill some of those gaps. And we see the increasing rise in private automobile traffic as being a very serious safety threat overall. Our counterparts on the east end of the state in Philadelphia are deeply concerned about the safety implications of these micromobility devices that are perhaps consumer-grade rather than commercial-grade devices operating in a very complex street environment. And so they do not necessarily want to see these kinds of devices arrive there any sooner than they otherwise might. So there's a lot of concern. I think both perspectives are equally valid. And I think the important thing is to know why you're doing this so that you're not, as Brian said, distracted by the shiny, new thing. And that's why we always start and end with our principles. Is this actually going to meaningfully move us towards those objectives that we have? Because if it's not, then it's just some kind of a whiz bang fantasy and we really don't need to pursue it. But if we do believe that I can actually make good progress towards one or more of those

objectives, then it's worth another look. And we just need to work out the details and the way that works for our community.

All of you have touched on doing community-based outreach and education. Can you provide a few examples of what that looks like or how it's done well?

Anita Tang: For us, BlueLA, we do a lot with the pilot, we do a lot of community forums. And what we do is we partner with local community-based organizations (CBOs) and also for this pilot we actually worked with three community-based organizations as our steering committee. They're the ones who steer us to the right direction and also like connect us with the local CBOs so we can host these types of community forums. We always do that in the evening hours to target our audience because most of the people are at work. And at these disadvantaged communities, we often offer babysitting services and also a light snack. So that is kind of like—I wouldn't say that's how we draw the people, but it's actually helped the community to really begin the participation. I think outreach is essential. You have to go out to the community to really introduce the service because when BlueLA first started before we had a station, before we had anything it's very, very hard to get into the community to tell them what actually car sharing is. And also how they can use electric vehicle and everything. Things got easier when we had the actual station and the cars roaming around town. But education and outreach is essential to make the program successful. And also going forward, like as I said, with the council district and with the difficulty to site the location, actually after when you educate the constituents, when they are the ones who voice their needs for these types of services then it helps us to move this program along the way much better and easier.

How did you develop your Mobility Principles?

Karina Ricks: I mean they have just evolved over time. In a lot of ways, they were just mom and apple pie. That's what we heard from a lot of people. With regard to the Pittsburgh Mobility Collective (PMC) what we are doing there is we are running a series of four sort of deliberate pilots that are focused on different use cases. And so we are reaching out to organizations that expressly served certain groups that we believe have mobility gaps so that we can create and we've gotten foundation funding to help us actually provide financial assistance to these pilots, one of which for example is focused in a particular neighborhood in our city where younger African American men have a significantly higher rate of unemployment than the general population. And so we're working with a group that works specifically with that group to see why is that that they are having challenges gaining and maintaining employment. To what extent could mobility services associated with what the PMC offers help to offset that. And so we're doing sort of the design-based thinking with them to craft these pilots and put together sort of a subscription package of mobility and that we can track those outcomes with them. And another community is focused more on parents with school aged children or caregivers with school aged children needing to kind of do a number of different things with them and how might we package these services for them and tracking how they choose then to use the suite of different mobility services. So we're working directly with those groups as sort of educated users to see how we can package this to make it work for the larger populous.

Questions Not Answered during the Webinar

In regards to the electric vehicle (EV) carshare deployment, are the EV charging points and vehicles, more in downtown/metro areas or residential areas? Would you add more in the residential areas?

Karina Ricks: Yes. We are definitely working it on both sides of the equation - the mobility and the land use sides.

Janna Smith: For Los Angeles, the charge points and vehicles are in both downtown/metro areas and also multi-unit residential areas, which meet the requirements as a disadvantaged community.

What other steps is Pittsburgh taking to ensure access to fresh fruit/vegetables? Beyond mobility options, are you encouraging businesses to locate where there are gaps, or building community gardens?

Karina Ricks: We are approaching the challenge of food access from three different angles: 1) improving efficient travel to grocery stores, farmer's markets, etc. so that people can achieve that 20 minute travel time goal whether by transit, bike, or walking; 2) the land use side by supporting development in underserved communities which in turn helps provide the "rooftops" necessary to support produce-selling retailers; and 3) working on innovative mobile delivery and sales approaches including mobile produce trucks (think "ice cream trucks" with produce instead) and other delivery options.

Resent research on TNCs has shown a significant net increase in emissions versus the types of trips replaced. What work is being done to determine the climate impacts of micromobility operations compared with the trips they are replacing?

Brian Holland: Micromobility and ride-hailing associated with TNCs are both evolving industries. Numerous studies highlight the climate impact of traditional (motorless) bike-sharing through a reduction in car use, vehicle miles traveled (VMT), and delayed purchase reduction in household vehicle ownership (e.g., Fishman et al., 2014). Electric bicycles (e-bikes) also have robust results indicating positive effects from trip replacements (e.g., Kämper et al., 2016).

Even though research on newer modes like e-scooters is sparse, the evidence is building to evaluate the impacts of significant urban short car trip replacement. Also, researchers are considering the potential adverse effects of walking and transit replacement.

While it is essential to note an electric scooter or e-bike will never have a lower climate impact compared to human-powered devices or a transit system at full capacity, providers are adjusting supply chains and improving costs (Hawkins, 2020). E-scooters and e-bikes also have the potential to replace up to 50 percent of car trips in some cities (INRIX, 2020). Recent research conducted at the University of California, Los Angeles Institute for Transportation Studies on shared electric devices also found promising positive climate impacts (Barnes, 2019). Through the increased use and presence of devices, both e-bikes and e-scooters are contributing to car trip replacement, a reduction in VMT, as well as e-scooters facilitating transit trips as last mile/first mile providers. Shaheen et al. (2020) present an overview of all shared modes and various environmental and social impacts.

Nonetheless, the field is unsettled and will continue to grow. As with the ongoing research evaluating the climate impacts of TNCs, the use, efficiency, and fuel sources associated with micromobility devices will change over time as providers respond to policy mechanisms and consumer preferences.

Sources

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