SUMMARY REPORT

Pittsburgh, PA

April 27, 2022
Hosted by the Association for Commuter Transportation

The Association for Commuter Transportation is the leading advocate for the Transportation Demand Management (TDM) industry and premier association for TDM professionals and organizations.

ACT strives to get the most out of our transportation system by empowering the people, places, and organizations working to advance TDM to improve the quality of life of commuters, enhance the livability of communities, and support economic growth.

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Facilitated Discussion Tables

To tap into the knowledge and expertise of the participants, the Future of Commuting Summit featured an afternoon of facilitated small group discussions. Throughout the afternoon, nine simultaneous table discussions were held, gathering valuable input and opinions on a range of topics about the future of commuting. Each discussion lasted 45-minutes when participants moved to a new table of their choice and the conversations continued, fostering solutions and insights relating to common issues in TDM today and in the future.

- **How must TDM Programs Evolve Post-pandemic** Tim Phelps, Transportation Management Association of Chester County
- **Is MaaS Universal? Who’s not Being Served and What to do?** Eva Hsu, ICF
- **Expanding Mobility Options or Reducing VMT -- Are they Mutually Exclusive?** Lisa Kay Schweyer, Carnegie Mellon University
- **Key Elements of Shared Commute Offerings in a Post-COVID World** Dion Beuckman, Commute with Enterprise
- **Shaping ACT’s Policy Platform for the Future of TDM** Jessica Alba, Stanford Transportation
- **On-Demand Solutions to Universal Mobility Challenges: How Does Microtransit Technology Improve Social Equity?** Jacob Greig, Liftango
- **Policy Pick and Play** Matt Meservy, Director, Tennessee Department of Transportation
- **Transitioning Private Shuttle Operations to Electric** James Wright, WeDriveU
- **How can technology advance TDM programs?** Facilitator: Andy Keeton, Commutifi
Kicking off the 2022 Future of Commuting Summit, was a panel of local (Pittsburgh) transportation leaders including, Kim Lucas Managing Director, Department of Mobility and Infrastructure, City of Pittsburgh; Chris Watts Vice President of District Development, Pittsburgh Downtown Partnership; David Huffaker Chief Development Officer, Port Authority of Allegheny County; and Vincent Valdes Executive Director – President & CEO, Southwestern Pennsylvania Commission with Lisa Kay Schweyer Program Manager, Carnegie Mellon University and ACT’s Board of Directors as the moderator. The panelists provided an overview of the current transportation projects being advanced by their respective organizations and the future transportation initiatives that are being discussed. Ms. Lucas shared details on a program aimed at easing the burden on loading zones and bike lanes. The city found that there are times during the day where people will use loading zones as parking or will park in the bike lane, which negatively impacts the users of these spaces. The answer was to set up cameras to monitor the spaces and issue citations to people in real time to better manage these spaces.

Mr. Watts presented the steps that the Pittsburgh Downtown Partnership has taken to bring people back to the downtown neighborhoods post pandemic and their efforts to increase the use of public transportation while doing so. Mr. Huffaker spoke about the challenges of keeping up with the infrastructure around Pittsburgh which includes 446 bridges, tunnels, toll roads, highways and rural roadways. Pittsburgh has a lot of infrastructure in a very geographically challenging area. He talked about how the Port Authority of Allegheny County continues to ease traffic and promote public transportation. Mr. Valdes focused his comments on the SPC’s mission to improve mobility in Southwestern Pennsylvania and to promote economic development as well as place making in Pittsburgh.
During the Summit attendees were all participants in a new activity “The Human Mobility Spectrogram.” The goal was to get people sharing their opinions on various issues by voting with their feet. Session facilitators, Andrew Glass Hastings (TransWest) and Jessica Alba (Stanford University) posed statements that one could agree to, disagree to or land somewhere in the middle. Participants than moved to the corresponding side of the room or somewhere in the space between. The result was a meeting room filled visual representation of the opinions of the group.

Eighteen thought provoking statements were addressed and the differences of opinion sparked some lively and interesting conversations surrounding what the future of TDM might look like in the US. We voted with our feet on several TDM related statements including free transportation. This exercise got everyone to visually gauge their colleagues opinions and think critically about the role and opportunities for TDM, as well as, understanding that there are varying shades of thought on TDM strategies even among professionals in the field. Sometimes the viewpoints of others were impactful enough to change the minds of others in the room and most importantly sparked conversation well after the exercise was over.
The second panel was titled, “Commuting to Work after the Pandemic - An Employers Perspective.” In this panel Tony Hudgins, SVP of Partnerships & Strategy at Actionfigure and Member of ACT’s Board of Directors moderated a panel of speakers from across the country representing a spectrum of viewpoints on the return of employees to the work site. Among them were Brendon Harrington, Senior Director of Global Transportation at Google and ACT’s BoD, Cate Irvin the Director of Placemaking and Activation at Oakland Business Improvement District, Frank Mongioi, Jr. the Vice President of Sustainable Mobility at ICF and ACT’s BoD, Don Charley the Assistant Vice President Parking and Transportation at University of Pittsburgh Medical Center, and Danielle Glaser, Senior Program Manager, Global Transportation at LinkedIn.

Much of the discussion focused on how should employers offer the best commuting options to their employees; how do they help employees return to work sites post-pandemic and how will they handle the fluctuation that comes with a hybrid work schedule. Mr. Harrington talked about Google's shuttle efforts and how they have had to toggle service to best meet the times that employees would come into the office. This sentiment was echoed by person from LinkedIn who said that LinkedIn is not requiring employees to commute into work 5 days a week. She continued that they are now focused on ride share, vanpool and shuttle services that would help employees easily get to and from work within the reality of these evolving travel commute patterns. Ms. Irvin spoke about the important role that public infrastructure and placemaking have in the return to work for both the employers needing parking and other types of space to deal with differing flows of employees; and the employees needing spaces that will help them get to work but will also effectively use the space to create leisure spaces and bring vibrancy to the area. Mr. Charley brought forward important thoughts and viewpoints as an expert in parking and transportation for a major medical center.
Within this discussion, attendees explored the idea of increasing mobility options and whether that idea is in conflict with the overall objectives of transportation demand management and the goal of reducing vehicle miles travelled (VMT). There were a few common themes between each of the three conversations taking place. The first being, if providing a person more transportation options for every trip they take, which may include a personal vehicle, increased their VMT, our goal should be that overall VMT “should” still decrease. The next common idea was regarding the calculation of VMT; should VMT for gas vehicle be measured the same as electric vehicle, scooter or bicycle trips? Do all of these modes use the infrastructure the same way? These were the questions that the group grappled with to figure out how VMT was different over different modes. In comparison to the historical ideology of TDM which was largely focused on reducing VMT, this conversation signaled a possible shift in focus to prioritizing mobility choices. Participants agreed that this was also the way the US Department of Transportation has been operating, prioritizing an increase in mobility choice even if VMT increases. There may be an opportunity for ACT to engage with DOT on this topic.

Other questions raised that could be important for TDM entities to continue to think about, included the continued need for increased public education and awareness of available transportation options, if there are other ways that the benefits of TDM strategies can be measured by VMT, and how does place making play a role in the general discussion. Participants were also interested in how this discussion relates to the gas tax versus mileage-based user fee funding structures. People were also looking to use this as an opportunity to reach out to commercial real estate organizations to demonstrate how mobility options are baked into their member’s planning.
Providing a break from the standard discussion, this table revolved around a memory card game to spark conversation on a range of policy related topics that included: resistance/pushback, Performance measures, technology, human resources, funding, parking/curbside management, land use/zoning, and ownership/accountability.

“Resistance and Pushback” centered around resistance to TDM policies and pushback from the general population. Some participants highlighted a need for TDM professionals to see the other side’s perspective as many are often in car centric cities. Other participants felt pushback was due to the uncertainty of TDM policies in the eyes of commuters and pushback was more apparent with mandatory policies than just guidance. There was a call for data driven and transparent approaches that would aid TDM professionals in decreasing pushback. On the topic of performance measures, many thought they were imperative to the success of TDM programs. Measures like participation rate, mode shift and individual employee metrics were deemed most effective by participants. During the discussion on technology, participants agreed that policies needed to be flexible enough to include new and future technologies and that current policies did not do that. They believed that a lack of collaboration in policy making between TDM professionals and tech companies would hinder the advancement of technology and that technology should be able to push policy.

For the human resources topic participants had a mixture of feelings ranging from HR being critical to employee retention, key to finding the right partner and building relationships and the belief that HR departments are largely reactionary and not able to get ahead of employee transportation challenges. On the topic of funding, participants thought that several key types of funding, including Urbanized Area Formula Funding (Sec. 5307), Formula Funding for Rural Areas (Sec. 5311), vanpool subsidies, impact fees, membership fees, and improvement district funding were key to advancing TDM. They also felt that there was a need for more stable funding sources and a need to diversify program funding. On the topic of land use and zoning many felt that these policies can dictate success for TDM. They felt parking minimums and shared parking should be included in zoning and advocated for by TDM programs. Examples were given, a Buffalo, NY study that showed that parking minimums where effective in decreasing parking demand and the Atlanta Beltline being successfully repurposed to support more sustainable development less reliant on parking to attract economic activity.
As the leading voice for TDM on Capitol Hill, ACT’s policy cornerstones layout priorities and focus for the organization and the field. Last updated in 2016, ACT has begun an effort to update its policy platform and is utilizing the table discussion to gather feedback and ideas from participants. Core to each discussion was understanding what has changed over the past six-years, which all agreed is a lot. The participants felt that the definition of multimodal had changed and become more holistic going beyond the simplistic idea of a parking garage with a bike rack being considered a multi-modal facility. The recent passages of the Infrastructure Investment & Jobs Act (IIJA) and its funding of new programs related to TDM; and housing affordability/land-use issues impacting where people can live and their connection to accessible transportation options need to be reflected within ACT’s Cornerstones. In addition, the growth of MaaS ideals, along with advancements in AVs and EVs have contributed to increased shared mobility usage and electric vehicle ownership. Most importantly they looked back and saw that we are seven years closer to the target years for action on climate change and emissions are still increasing.

When looking at the current Cornerstones, the participants felt that they were good but broad. They felt that since urbanization had changed so should the Cornerstones. The stakeholders section should be expanded to include housing advocacy groups and transit advocacy groups. Many felt that the Cornerstones were limited to just commuter transportation as in work transportation and should be reworded to include all types of trips. Many felt that there were a lot of benefits to TDM policies that needed to be listed like, equity, inclusion, sustainability, health, congestion relief, efficiency and many more. To our participants the Cornerstones were a great base to work with but need to be expanded beyond the general platitudes and have specific priorities for the next 1-3 years.

There was also question of who we were trying to appeal to and if a more targeted message that may turn some away but would pull in stakeholders that believe in the message was better than trying to capture everyone with a more general message.

While we may not know what the future of ACT’s platform maybe just yet, we know that the future will be determined by the solid goals that we set and our ability to pull in as many stakeholders as possible to bring about the change that we all wish to see in transportation.
The pandemic has had a greater impact on TDM then the implementation of any single policy or program. In a matter of weeks, we saw millions of people shift from commuting to a worksite to working remotely. As the pandemic slowly runs its course, we are seeing permanent impacts on commute behavior that we as an industry need to incorporate into the next set of strategies and programs aimed at ensuring an efficient multi-modal transportation system exists for all people.

In this discussion participants were asked to look at TDM and TDM programs post pandemic to assess the current standing of TDM and suggest ways to improve upon it. The first step was to identify the current culture of the world and how that fits into TDM. All groups brought up the idea that TDM needs to be technology driven. A lot of ideas were discussed regarding transportation for commuter students to and from school. The change in work habits and productivity habits will also affect TDM. They felt that fixed route transportation for large employers may help with closing the gap in our transportation networks. TDM has the opportunity, post pandemic, to establish itself as the most effective strategy for our future transportation challenges and could bring in more diverse stakeholders to the implementation of solutions. Participants felt that with traffic and congestion returning, TDM should be in a position to offer a strong alternative.

There was agreement that essential workers and blue collar workers have been underserved by TDM programs pre-pandemic. As an industry, we must look at how TDM can help these workers with options. How do we address and resolve the lack of public transportation options available to these populations? There may be language barriers and other obstacles that may prevent public transportation from delivering effective service so participants felt it was time to overcome those obstacles.

With telecommuting becoming such a big part of work life, it was also a big topic at the table. With employees not wanting to go back to work in-person daily, the TDM community needs to take into develop new strategies focused on the hybrid work environment and the unique transportation challenges it presents. Traffic may be higher on certain weekdays and lower on others due to a varied work schedule.
The environment and climate change have long been front and center in TDM conversations and this was central to the discussion on “Transitioning Shuttles to Electric”. The conversation focused on the upsides and downsides of transitioning a shuttle fleet from standard carbon-based fuel to an all-electric fleet. While all were in support of this transition, some concerns were shared about how to get people to embrace this change and the challenge how to build out the necessary infrastructure to accommodate the fleets.

Infrastructure needs include expanded parking lots to accommodate charging stations for all shuttles along with the utility lines and systems to provide the required power. There were also concerns regarding the drivers themselves and whether they would feel nervous about running out of power; however, a participant who had experience with electric shuttles said that most drivers were fine with it and that routes were planned around the buses battery life providing a 30 percent buffer. The price of electric buses was also a concern. Due to supply chain issues and the pandemic the average cost is 1.5 million dollars which is much more expensive than regular buses. On top of that there’s the issue of charging. Charging takes much longer than refueling and there is currently no way to swap bus batteries so every bus must charge while parked.

On the upside, one participant brought up the fact that having all electric shuttles and buses could support wider adoption of electric vehicles, encouraging cities to increase the amount of electric vehicle infrastructure they build further incentivizing the general public to purchase electric vehicles. There was also a point made regarding the federal grant funding for electric fleet transition that offsets part of the cost. In addition, it was noted that daily operating costs could go down about 50% due to eliminated fuel costs and significantly reduced maintenance for the electric motors in the bus.

The future that was discussed for electric shuttle service was one where battery technology had improved, the infrastructure to support a city of electric vehicles was there and employers and governments alike were able to run all electric bus routes.
At this table the discussion revolved around the ability of micro transit to alleviate stress on large bus routes and to provide transportation to those who did not previously have easy access to a main form of transportation. Much of the conversation focused on on-demand service that would function as needed by the citizens of the area instead of a fixed route service. Participants spoke about the needs of rural areas and how they can be met through the use of on demand micro transportation. There was a realization that the solution to the equity problem may not look like a bus and could be something that has not even been invented yet. However, there is much that can be done with the tools we have now.

There were a few common themes born out of the three distinct conversations that took place. Those themes were the need for a public on-demand option, on-demand as a method to increase equity in transportation, the ability of on-demand systems to alleviate stress on the current system, and opportunities for on-demand service to benefit rural and harder to serve areas.

Each of the discussion groups highlighted the need for developing new public on-demand systems, Participants noted how services like Uber have taken the on-demand business by storm and is largely the most popular in that area. The groups felt that a public on-demand option would be the best way to provide better, farther reaching and more convenient service. The idea was that public transportation should be able to keep up with and better integrate the innovations of the private sector.

Noting that rural areas were particularly underserved by public transportation and did not have access to many other options besides using their own cars, many saw the need for an on-demand option for rural areas so that it could be flexible and grant mobility to those who either did not have a means or want other options. The groups felt that an approach like this would also help improve mobility and access for the entire system by creating new connections between modes.

The main point that was raised in each conversation was equity for passengers who are in underserved communities. It was felt that new on-demand forms of public transportation would be able to help people in underserved communities where a bus cannot fit or where the infrastructure of the city does not reach.

The groups all believed that communities should pursue a mix of public transportation that integrates traditional fixed routes with new on-demand routes to ensure public transit has the flexibility to connect and move all people throughout an entire region.
How Can Technology Advance TDM Programs?
Andy Keeton, Commutifi

For this discussion table participants were asked to look at the intersection between technology and TDM. For many of the participants data gathering was top of mind. The idea was raised that there are current ways that sensors, trip trackers and online surveys already help improve the customer experience and the efficiency of the program, but, that there was a difference between survey data and “actual” data. When looking at survey data there may be a level of human error that presents itself when riders are asked about specific parts of their trip. Many thought this could be prevented by using tech to collect raw data from the vehicle and the trip and reach a more concrete conclusion. Technology was seen as an aid and not a substitute for TDM. Some participants felt that technology could help with route planning by figuring out timing, average speed and other parameters while also helping to find new ways to move people to their modes of choice. Some participants felt that, even if technology made rides more expensive, as long as service improved ridership would continue to grow. This data would possibly be fed into a single system to aid decision making in TDM programs. Many participants felt that the use of e-bikes would increase as long as the cities where able to provide the technology and infrastructure to support them. Tech could also connect people to modes in a schedule and travel time sense. By connecting people to transportation through apps and map applications they feel more accessible and less stressful.

One interesting idea that came out of this topic is that some groups had a focus on software and data while others had a focus on hardware and infrastructure technology. Group three did talk a bit about tech and how it could help transportation but they also talked a lot about how the transportation systems across the country are old and need to be updated. They specifically felt that the smart signal technology would be a good investment to ease congestion. Smart Signals generate time-dependent performance measures for intersections including intersection queue length and arterial travel time so that it can adjust the timing of lights to ease traffic flow. Another useful installation was the translation kiosk to help people navigate transit systems in their native language. Other groups like group 2 focused on how tech could boost ridership and infrastructure for e-bikes. Finally group 1 talked mostly about how tech could help providers gather data. There were many different approaches to the same question and it just further proves that there are infinite ways in which technology can help TDM and move it into the future.
At this table there were 4 sessions and they all tackled different mobility as a service (MaaS) related questions. MaaS integrates multiple forms of mobility into a single on-demand, comprehensive system. This allows the rider to select multiple forms of transportation through one application and one payment system. Group one’s task was to define Mobility as a Service or MaaS. The second group looked for ways in which MaaS could help the transportation industry and also tried to find pitfalls in MaaS. Group three was tasked with finding the goal or goals of MaaS. The final group discussed specific policy that they felt needed to be in place to create a successful MaaS program.

Group one defined MaaS as a platform that provides seamless end-to-end mobility trip planning, booking/ticketing, and paying across a variety of modes. They felt that MaaS had to include ADA and paratransit options as well so that the platform could actually bring service to all people. The group felt that MaaS was only effective if it was on a mobile app, promoted shared economy and was not privately owned, created new opportunities and new choices for people and had accessible information.

Group two felt that MaaS could help the transportation industry in big ways. The first way being affordability; group two felt that MaaS would promote the affordability of transportation for riders by having all the modes in one place and having prices listed there. They also felt that MaaS would promote expansion win area where expansion may not have been possible. The last point was that all data would speak the same language, meaning, considering that everything is on the same app, you would be able to pull data with uniform metrics. Group two also looked at pitfalls. The pitfalls they found were people who didn’t have phones or banks, if providers did not service a particular area, reliability of service and inclusive design.

Group three was tasked with assessing the goals of a MaaS program. The main goal would be to replace the requirement of a car 24/7. The second goal would be fare integration, one cost per trip regardless of modes or transfers without penalty or multiple payments. Another goal was to have one universal app not a suite of apps that correspond to different modes.

Group 4 discussed specific policy that they felt needed to be in place to create a successful MaaS program. They felt that providers would need to invest in broadband and have a call center and that public transportation should be the main player with private modes to compliment the service. The group felt that a large investment in infrastructure would be needed to support the modes. (ex. protected bike lanes, curbs, pick up and drop off spots, bike racks, etc.) Lastly, the group thought that data privacy needed to be discussed; when you have all users on one app you have access to a wealth of data so it may be easy to overreach. The group felt that data would have to be regulated and the providers would have to be held accountable for how they use that data.

This discussion table was able to flesh out many facets of MaaS by using a unique approach to focus groups on one specific part. Their finding were clear, MaaS can work if we invest in it and it can provide mobility to people who have gone without for a very long time.
FUTURE OF COMMUTING SUMMIT

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