Making Mobility a Reality

Two ITE members involved in the mobility as a service/mobility on demand (MaaS/MOD) sector share their thoughts on opportunities presented by MaaS/MOD to better serve users and shape the future of transportation.

**ITE JOURNAL:** As someone with nearly two decades of experience, how have you seen the mobility landscape evolve during your time in the profession? What are some of the most significant changes?

**WESTROM:** It’s actually pretty stunning to sit back and observe the industry changes. Some of them quite profound—like the way digital access via smartphones now enables mobility on demand—and some relatively simple—like the availability of high-quality aerals and street imagery via Google Earth. When you consider the moment we're in, it’s helpful to remember past moments of industry inflection. It appears that we’re essentially still in the third great Industrial Revolution. Tremendous transformations have already taken place, and more are on the way. Our careers in mobility will be broadly spent working out these impacts, as every such revolution has transportation outcomes. Past Industrial Revolutions were the same. In the early 19th century, steam and steel combined to allow the possibility of railroads. This allowed human communication to move faster than ever before. In the early 20th century, electricity and the ability to mass-produce changed access to mobility—democratizing it to the masses—transformed the way we move. This revolution will be just as transformational, and I find the possibility of shaping these new outcomes for good to be incredibly thrilling.

**ITE J:** In your position at Ford, what are some of the biggest emerging trends you see in mobility right now that excites you?

**WESTROM:** Everyone is eager to leap to autonomy, and when it occurs, it will be incredible. But just as monumental, I believe, will be the advent of connectivity (and this is likely necessary to fully realize the promises of autonomy). The ability for all users to communicate with each other and their surroundings offers incredible opportunity. Congestion mitigation, environmental benefits, and—most importantly—improved safety, are all likely. This is an area where Ford is leading. But there are risks, too. We need a clear federal regulatory picture for technologies in this realm, and digital privacy must be codified. Further, deploying this technology at scale will require significant resources. But the incredible potential is exciting. Connectivity—combined with proliferating new forms of mobility (like micromobility), MOD, and, someday soon, autonomous vehicles—will transform the ability of cities to build safe, reliable, and efficient networks like never before.

**ITE J:** When designing and deploying mobility options for users, how is community engagement key?

**WESTROM:** Engaging with the community is critical, and I absolutely love helping people understand the importance of well-designed transportation. Access to mobility is one of the fundamental building blocks in our communities. A city is defined by the character of its streets, and these spaces are public! The people of a city own the streets. Thus, the street should serve its citizens. I have loved transportation since I was in junior high, and count it a privilege to work in this field. Through my role at Ford, imparting that passion and helping build an understanding of the importance of accessibility in cities across the country is a joy.

**Ryan J. Westrom, P.E., PTP (M)**

Head of Mobility Engagement – East Coast
City Solutions, Ford Mobility

**Education**

Massachusetts Institute of Technology,
Master of Science in Transportation
University of Illinois at Urbana-Champaign,
Bachelor of Arts in Urban and Regional Planning, Bachelor of Science in Civil and Environmental Engineering

**Professional Activity**

Transportation Research Board
Professional Engineer since June 2006
Professional Transportation Planner since December 2009

**ITE Involvement**

ITE MaaS/MOD Steering Committee
ITE Smart Communities Task Force

Ryan has been an ITE member for more than two decades and served as president of his university’s ITE Student Chapter.

**Fun Facts**

Ryan is a husband and father to three girls. He is a city dweller, basketball junkie, news reader, sports enthusiast, politico, and traveler, in pursuit of livable places and social justice.
**ITEJ:** How has MaaS/MOD changed the landscape of urban mass transit systems? What is true for users today that wasn’t true five, 10, or 20 years ago?

**VAN ANDEL:** Because of new developments like sharing, autonomy, and connectivity, transit systems today are more focused on passenger experience. In the past, mass transit focused on moving buses—now the focus is on moving people. Transit systems are thinking about their relevance to the city, asking questions like, “How can we bring as many people to their destinations in as little time as possible?” or “How can we do that with the fewest emissions and lowest congestion possible?”

We see private providers focusing on where people want to go, not always integrating to transit. As a result, mass transit operators now have to understand how to get their customers from door to door at all times in a very competitive market.

During the last weeks we have seen a complete collapse of mass transit. MaaS/MoD will very likely take a more prominent place in public transportation for the years to come. There is a specific need to get people to and from their essential jobs where mass transit is not a viable option due to the low demand density. It is very likely that MaaS/MoD will take over mass transit where service frequencies of 15 minutes or less cannot be maintained. These concepts are different from what it was five, 10, or 15 years ago.

**ITEJ:** In your career, when you’ve led MaaS planning projects, what are some of the big picture considerations you have to take into account in order to be successful?

**VAN ANDEL:** From the onset, you have to define what success means for your project. There are so many different variables these days with MaaS/MoD concepts. Maybe a factor of success is understanding the most important policy measures to facilitate change. Is it clear what is probable to happen, versus what is possible to happen? With all the unknowns and variables of the future, there are a lot of possibilities, but the probable outcomes are fewer.

Understanding the big picture is important, such as knowing the geographical limitations of where you are operating. What is your demand density, and what is the availability of roads and infrastructure? It is also important to understand regional differences between travel preferences and travel behavior. So realistic expectations and a good understanding of the local variables are important considerations.

**ITEJ:** What is the role of data in MaaS/MoD planning and execution?

**VAN ANDEL:** MaaS/MoD planning, scenario management, and execution can only happen when you understand the available data. Ensure that you’re getting data from various sources, so you really understand where people are traveling to and from. It is critical to allow data sharing before, during, and after the project. You cannot do any analysis after the fact without a complete view of the data. Cities and local governments should make sure that they get the data they need and have agreements in place to do so.