

# MOBILITY REDEFINED

WITH LOCKDOWNS EASING AND SERVICE LEVELS RETURNING, THE TRANSIT INDUSTRY ISN'T AS CONCERNED WITH REBOUNDED AS MUCH AS IT IS WITH RESHAPING.

By **Mischa Wanek-Libman**, executive editor

**T**HE IMPACT OF THE COVID-19 PANDEMIC IS WELL UNDERSTOOD AMONG North American transit providers. Use has plummeted; revenues have been devastated; and this is all compounded by the fact that in the era of social distancing, the core of what transit does best – move crowds – is ineffectual. “This is the largest fundamental shock to civilization that I think any of us have experienced in our lifetimes,” said Jarrett Walker, international consultant in transit planning. “I don’t think there has been a shock on this scale since World War II.”



Just as the recovery from World War II delivered a level of prosperity in which many aspects of modern-day life are measured, the post-pandemic recovery period holds long-term potential for reinvention.

"[This shock] invites us to create new habits by destroying a lot of the assumptions on which previous ways of doing things were built," said Walker. "That's terrifying, but there is an enormous opportunity to create a better world out of it."

For the transit industry, the conversation is shifting from the assessment of what was lost to one that is supportive of a future where the industry is reshaped and improved.

## Planning

Service levels were reduced quickly as riders stayed home, but those levels may need to return just as fast to meet demand or stay ahead of demand to support continued social distancing protocols. Agencies will need to respond rapidly to these changes, while preserving the usefulness of their networks. Maintaining frequencies on major lines will allow agencies to accomplish both.

In the short-term, this could mean encouraging people to walk or use bicycles and scooters for short trips, say under two miles.

"That would help transit concentrate on the longer trip where transit is the only alternative to driving. For people who don't have the option of driving, transit is absolutely essential. The key is for transit agencies to be allowed to focus their limited resources on that role," said Walker. "I think that the division of labor between transit and micromobility has never been clearer and the need for both of them to succeed in their own way has never been clearer."

Longer-term, Walker is intrigued by the possibility that increased work from home could lead to a lasting decline of peak

demand. He explains that a lot of infrastructure planning – both highway and transit – is based on peak demand, but the decline of the peak could undermine the case for some of these projects.

"There are a lot of big projects that still need to happen because they are about creating high frequency, all day useful patterns of service," explained Walker. "The case is going to be more uncertain for a while for infrastructure that is justified primarily by the peak."

On the operations side, he recognizes there are transit professionals who do not want to see the peak go away but says providing peak service is expensive, especially when compared to running a vehicle back and forth all day.

"We have all of these expensive shift patterns and split shifts; we have this fleet that we need to own even though we don't use it very much, we have all the costs of reverse peak direction, dead-heading. Given this, a small drop in peak demand could allow us to offer much more efficient all-day network structures in the future," said Walker.

## Policy

Peak travel periods in countries that have emerged from lockdowns before North America are showing vehicle traffic increasing, while transit use remains depressed. David Zipper, visiting fellow at the Harvard Kennedy School, Taubman Center for State and Local Government, explains this information means there are still a lot of trips that will occur following the ease of stay-at-home orders but people will be more inclined to take an

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owned mode of mobility over a shared mode.

"It's human nature and rational that your personal car or bike or scooter are going to be a little more desirable or feel a little safer than public transit or ride hail," said Zipper.

Rather than efforts to make car use more comfortable by waiving or reducing tolls and parking fees, which could contribute to traffic, he hopes there is a recognition that individuals will be comparing the benefits and costs of each mode and effort should be made to improve the comfort of transit or alternative modes of travel.

A suggestion of where to begin: sidewalks.

"Improved sidewalks are a valuable way to not just make it more comfortable to walk, but to enable other forms of transportation that go beyond driving your personal vehicle," said Zipper.

Bicycle infrastructure could be another opportunity. According to The NPD Group, a firm that tracks retail trends, March sales of adult lifestyle bicycles grew 121 percent while transit/fitness bicycles increased 66 percent, supporting the idea that there could be a new group of urban cyclists.

Zipper explains that, once lockdowns are lifted, if this new group of bicyclists feels comfortable biking one or two days to work, then there is a positive outcome from a pollution perspective, a geometric perspective and bike use could serve as a contributor to transit use.

"Transit could potentially enable this type of trend by investing in bike parking and looking at ways to make it easier to bring a bike on board," said Zipper.

In whatever approach agencies take to win people back to transit and keep them safe, Zipper encourages quick sharing of both positive and negative information.

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is going to require experimentation, but it's also going to require sharing best practices at lightning speed," said Zipper.

### Alliances for a Stronger Recovery

One group looking to learn from its members is the newly formed North American Transit Alliance (NATA), which is comprised of North America's six major private transit operators – Transdev, Keolis North America, MV Transportation, National Express Transit, First Transit Inc. and RATP Dev. Dick Alexander, CEO of Transdev U.S. and chairman of the new alliance, says NATA was formed to support the development of new business models, shaping the transit industry and ensuring its resiliency for the future. He describes the pandemic as an incredible reorientation of how service is performed and notes the NATA partners operate 20 percent of U.S. transit services and bring the benefits of best practices acquired from their global operations where the reopening process began ahead of North America.

"We're seeing interesting travel patterns where the 'have-to' trips are coming back, but the discretionary trips are slower to return," said Alexander.

Keolis North America Executive Vice President of Market Development and Innovation Rahul Kumar, who leads Keolis' efforts for NATA, explains the recovery efforts will be focused on employees, riders and the clients NATA companies serve.

"I have no idea how long [recovery] will take, but it's going to come back, and this is our chance to determine and be deliberate on what the future looks like," said Kumar.

Both men agree technology will sway the recovery efforts, whether it is a lessening of demand from extended teleworking to the greater impact of autonomous vehicles to an opportunity for greater integration of mobility services.

"What we're going to see is the evolution of transit organizations into mobility organizations," said Alexander.

"This is the true birth of Mobility as a Service, which isn't a user defined option. It is mobility management that actually regulates the modes and delivers the most optimal solution," added Kumar.

The key to this is integration.

"We need to integrate, not supplant and not build private wealth on public infrastructure, but find a way to integrate [ride hailing models] into the public transit model so that it is the right mode for the right reason delivered the right way," said Kumar.

"Service, whether it's publicly operated or privately operated, is going to have to cover the whole gambit," added Alexander. "Integration and coordination will be needed to ensure that there is equitable distribution of services and that people have access to jobs."

### The Role of Data in Recovery

Uncertainty can dampen any form of recovery and providing concrete information to smooth and improve those recovery efforts begins with data, according to Ascendal Group, a consulting firm and transit operator.

The firm has partnered with GoMetro to utilize agent-based modeling to run simulations of how individuals move in and around a city using various mobility modes. Justin Coetzee, founder and CEO of GoMetro, says the modeling platform also incorpo-

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rates an epidemiology module. Cape Town, South Africa, is currently using the model to understand the impact of public health lockdown scenarios on transit ridership and the spread of COVID-19. As agencies enter a period of recovery and services return, the simulations can provide support for making informed and quick decisions.

"We need to relearn mobility patterns [in light of COVID-19]. How are people getting around? How do we plan for three months out? All this depends on data," explained Clayton Lane, international business development specialist with Ascendal Group. "Timely data has become incredibly valuable, even more than the past, and yet, our options for collecting the data may be a bit narrower."

Traditional ways of collecting data through person-to-person intercept surveys may be viewed as risky in a post-pandemic world, says Coetzee and Lane, but they still deliver rich information. Coetzee points to Capital Metro in Austin, Texas, which performed nearly 60 percent of an intercept survey batch before the pandemic hit. Rather than throw out the information, the agency decided to collect the remaining surveys following the pandemic. The information from the surveys will shed light on perceptions and movement patterns immediately after the pandemic, which can be compared to the information collected immediately before.

When traditional surveys may not be possible, Coetzee and Lane say data can be collected using passive techniques such as web surveys and mobile probing and measurement. This information is then fed into a simulation to help provide scenarios to drive decisions.

"There is an awareness and a realization that you're only as good as your data," said Coetzee.

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“We’re seeing an evolutionary change in how data impact operations, feeds into planning and gets implemented in the space of a weekend or a week.”

Lane adds that the transit community recognizes this as a time to rethink current ways of doing things and redo them in a better way.

“That too is going to require great data,” said Lane.

### Telling Transit’s Story

A key piece to the industry’s recovery can be found in how its efforts are communicated to employees, riders, community members and other stakeholders.

Recovery begins with the belief that it is safe to ride, according to Morgan Lyons, owner of Lyons Strategic, a media relations and communications firm.

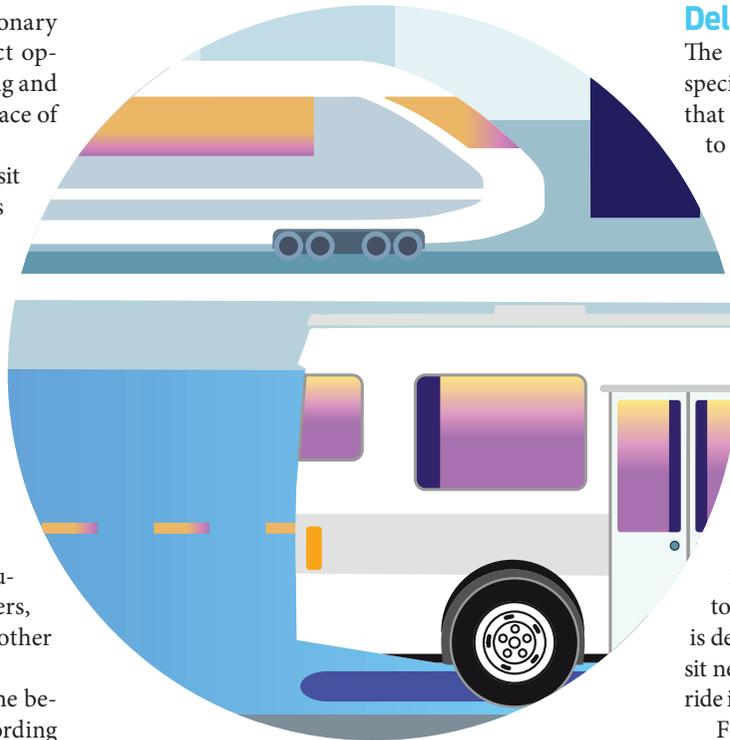
“There is a recognition that transit is an essential service and the first thing on everyone’s mind is focusing on safety,” said Lyons. “We have to make sure people feel safe to get on board.”

He explains this notion of safety begins with employees who must feel safe at work to deliver service that workers and customers will accept.

“This is not going to be a flip-a-switch recovery. This is something that is going to evolve over time,” said Lyons.

He recommends transit professionals perform three tasks as they tailor their messages during the recovery phase.

“The first is to take a breath and clear your head. Take a moment and reassess transit’s role within the community. The second thing is to listen to your agency, your customers and your stakeholders. This helps stress test your plan,” said Lyons. “The third is to act and act with a bias towards openness. We can’t hunker down and not communicate. We need to act.”



Lyons says those actions, at least in the immediate recovery period, should reflect the safety efforts being implemented by an agency from sharing images of vehicles being cleaned to having ambassadors at facilities reminding customers to practice social distancing to the installation of markers or other visuals inside vehicles promoting social distancing procedures.

Shifting to communication strategies involving elected officials, who may hold the keys to further or improved funding resources for transit, Lyons notes the industry provided many examples illustrating how essential transit is to a community from the delivery of meals to support local school students to the repurposing of paratransit vehicles for supply deliveries.

“This provides an opportunity to remind our elected officials that there is a cost to this essential service; transit is not complimentary. It is not the orange slice or the piece of parsley on the breakfast plate. It requires an investment,” said Lyons.

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### Delivering on Potential

The required investment, more specifically, the lack of support for that investment, can be a hazard to the industry’s recovery.

Walker warns of the potential of diminished support for investment once influential people stop using transit themselves, which could push agencies to make cuts that would undermine their essential mission and make it impossible to serve once demand returns.

“The biggest risk to transit is the failure of relatively fortunate, influential people to understand that everybody is dependent on transit and transit needs to succeed; whether you ride it is not relevant,” said Walker.

For Kumar, the opportunities and risks go back to transit’s essential mission.

“We still have the social ramifications of transit; we have given birth to the term essential and our drivers, our mechanics, our utility workers, our supervisors, they are essential and they’ve always done an essential job. The key here is that we can’t just have business models that are for some of us,” explained Kumar. “The digital divide still exists, and I’m concerned about whatever the future mobility divide looks like that is created by this. These are real opportunities for us to test and deploy new, more dynamic, more responsive services. We have to do it within the confines of public transit’s mandate, which is to be equitable and accessible by all.”

Alexander sees a future where the industry is not only different, but larger and more accessible.

“I think it’s going to be larger and there will be more jobs in this industry. I think more people will have access to public transportation that never had it before,” said Alexander. “The industry will be different, but it’s not going to be less important.” 