Intercity Buses

Planning for a Post-Pandemic Paradigm

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Intercity bus use experienced a surge before the COVID-19 pandemic. However, this segment of the transportation industry has struggled to make a post-pandemic recovery.

Intercity buses are one of the oldest forms of shared mobility. In the years before the COVID-19 pandemic, the intercity bus industry evolved to provide dynamic scheduling and pricing as well as simplified booking and boarding processes. However, at the start of the pandemic, intercity bus services halted.

In the early days of the pandemic, those who needed to travel between cities vastly favored driving alone in lieu of any form of shared transportation that required contact with others. As a result, intercity bus operators cut routes early in the pandemic. Operations were slow to resume. Schedules on many routes remained sparse even after vaccines were rolled out and the public health risks subsided. The pandemic's impact on the intercity bus industry was particularly harsh. Only now are some of the ramifications of these changes coming into focus.

Pre-Pandemic Intercity Bus Renaissance

The intercity bus industry experienced unprecedented growth before the pandemic and seemed poised for further expansion (*1*). The industry, which had seen little innovation for decades, embraced technology to provide dynamic scheduling and pricing. Booking and boarding were simplified through customer-friendly applications and electronic ticketing. Customers were enticed by free Wi-Fi and onboard entertainment.

The resurgence of intercity bus travel was led by private express bus operators using these technologies as an asset-light approach to compete with larger, established carriers. The private operators don't own the buses. Companies that specialized in providing marketing, advertising, technology, and ticket sales (i.e., the branding) contracted with independent operators who provided the buses, drivers, and service under the brand name (*2*).

These new players used algorithms and crowdsourcing to nimbly establish—and change—routes and schedules. Similar to dynamic microtransit operations, flexible intercity bus networks decided where and when to run routes and add stops based on demand.

On March 15, 2020, COVID-19 brought all of that to a halt as states began to implement shutdowns to prevent the spread of the virus.

Pandemic Aftermath

The pandemic had major ramifications on how people travel. From March through December 2020, the fear of infection kept people away from all forms of mass transportation: trains, airplanes, and intercity buses. On the brink of collapse, intercity bus operators were largely overlooked by economic industry relief bills until December 2020, when the federal Consolidated Appropriations Act of 2021 gave the industry a $2 billion lifeline via the Coronavirus Economic Relief for Transportation Services Program. For many operators, however, it was too little or too late. The Bipartisan Infrastructure Bill, enacted in November 2021, greatly benefitted all surface transportation modes, and an omnibus appropriations bill (Public Law 117-103) that was signed into law on March 15, 2022, included $2 million in funding for the Intercity Bus Security Grant Program in FY 2022.

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Morning sun meets passengers on their way to Pittsburgh, Pennsylvania. Sold-out buses with shoulder-to-shoulder passengers were a common sight before the COVID-19 pandemic, when intercity bus service was a popular option for travelers.

Even with these federal actions to bolster the industry, according to the Federal Motor Carrier Safety Administration, the 2,978 motorcoach carriers in the United States in December 2019 dropped to just 1,450 in December 2020 and rose only to 1,548 in September 2022 (*3*). The American Bus Association estimated that 25 percent of the bus industry closed because of COVID-19 by the end of 2021 (*4*). Some big carriers, such as Greyhound-owned Bolt Bus, did not survive. By the end of 2021, scheduled services were barely 30 percent of pre-pandemic levels. By late summer 2022, scheduled intercity bus traffic regained some ground, reaching from 65 percent to 70 percent of pre-pandemic levels (*5*).

Service returned slowly but steadily through winter 2022. Even so, as of this writing, the industry has not fully recovered and it may take years to return to where it was before the pandemic. COVID-19 undoubtedly changed the transportation landscape for intercity buses in the short term, but it is still uncertain where this sector will fit into the new normal.

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Stopped to pick up passengers in Seattle, Washington, this Bolt Bus—and many others like it—filled seats from 2008 until 2021 when service ceased because of poor sales. On each bus, a single $1 ticket was offered at random and other fares were often far less expensive than driving.

Repercussions and New Considerations

Today, there are a few things for intercity bus companies to consider when expanding service or adding a stop in a new market. One thing is certain: The demand for curb space in large cities has increased. Bus operators looking to provide or expand intercity services in the United States will need to contend with commercial delivery and passenger vehicles, both of which grew during the pandemic.

Throughout the United States, there is a lack of uniform regulation for intercity bus stops. Likewise, there is a bureaucratic entanglement of parking and traffic rules, permit requirements, and bus stand restrictions for intercity buses. The COVID-19 pandemic further complicated the regulatory requirements and access to curbs in cities that closed streets to vehicles to promote open space and enhance social distancing.

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Stay safe, a common message during the COVID-19 pandemic, echoed the concerns of travelers who stopped using shared transportation. Pandemic precautions had a disproportionate—and sometimes devastating—impact on intercity bus companies.

In December 2020, bookings on intercity buses in the United States ranged from approximately 22 percent to 25 percent of 2019 levels (*6*). With routes cut early on, schedules on many routes remained sparse even after the vaccines rolled out. Those who needed to travel between cities vastly favored driving alone or quicker transportation modes than buses, which tend to take longer than trains or planes to travel the same route. Traveler apprehension about contracting the virus eventually subsided, but travelers have been reluctant to return to intercity bus travel. In 2020, ridership was around 45 percent of pre-pandemic levels across the United States as a whole and rose from 60 percent to 70 percent of pre-pandemic volumes by February 2022 (*7*). According to the American Bus Association, the motorcoach industry lost 83 percent of its business in 2020 and 62 percent in 2021, and scheduled services were down by 69 percent for 2021 (*8*).

By late summer 2022, scheduled intercity bus traffic ranged from 30 to 35 percent below pre-pandemic levels (*7*). For comparison, as of July 2022, U.S. airline passenger volumes were only 8.3 percent below July 2019 levels (*9*). Most bus operators remained on a financial cliff in 2022 (*7*). The American Bus Association does not expect to see a recovery until 2024, at the earliest (*10*).

Future Pathways

The long-term impact of COVID-19 on intercity commuter buses remains to be seen. In the short-term, service levels and passenger demand have yet to rebound to pre-pandemic levels and driver shortages are impeding recovery efforts. However, the industry has experienced sustained recovery, and operators are seeing opportunities for expansion.

Demand for intercity bus service expanded throughout 2022 (*11*). Intercity bus services made strategic moves to expand service and bring business back through expanded routes and service offerings. Free Wi-Fi and power outlets in every row are now standard on most routes. Reserved seating and online tools to change reservations and see the bus's real-time status are increasingly common. New first- and business-class bus services have emerged to better compete with flying, with operators offering in-seat entertainment systems, refreshments, and attendants in the same manner as flight attendants on planes. Premiere services with private suites, lie-flat beds, and complementary snacks also are gaining popularity.

Curb Appeal

From a policy standpoint, cities generally support privately operated buses as a form of mass transit because buses reduce vehicular traffic and move people more efficiently than passenger vehicles do (*12*). From a quality-of-life perspective, however, residents often oppose buses idling on the curb space outside their homes and businesses. Many cities have seen a reduction in on-street parking spaces—some of which have been displaced by bike lanes, bike docking stations, and delivery zones for trucks or commercial parking (*13*). As a result, some bus companies have opted to incur the expense of off-street parking lots for motor coach departures and arrivals.

Increasingly, local agencies responsible for traffic management are trying to prioritize competing interests for the curb. During the pandemic, cities across the nation closed public sidewalks, streets, and plazas to vehicles to create outdoor

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Diners take advantage of new curbside seating at a Washington, DC, restaurant in the winter of 2021. Pandemic changes included increased use of outdoor, open-air spaces that aided in social distancing. Referred to as *pivoting*, not all types of businesses—including enclosed intercity buses with lengthy ride times—could reinvent themselves.

spaces for dining, shopping, and recreation. These changes helped restaurants and other businesses survive while promoting and enabling social distancing. Now that the public health reasons for these street redesigns have abated, cities will likely continue to reevaluate their curb space.

Electrifying the Fleet

In line with many jurisdictions' goals to become more sustainable, some private intercity bus operators are taking the initiative to switch to electric vehicles. Summer 2022 was a "watershed for electric bus pilots" in the intercity bus industry, with significant developments from companies that ran electric bus pilot programs (*5*). Current electric bus models have a range from 200 to 240 miles between charging. This is enough to cover popular corridors such as New York City to Washington, DC, and Seattle, Washington, to Vancouver, British Columbia, without range anxiety—the fear that an electric vehicle will not have enough power to reach its destination. More companies are expected to add electric buses to their fleets in the coming years. This will be aided by recent legislation, such as the Inflation Reduction Act of 2022, which earmarked tens of billions of dollars for electric vehicle expansion.

The Inflation Reduction Act includes tax breaks and financial incentives that intercity bus companies could use to purchase zero-emissions vehicles and charging infrastructure. The act extends an expired tax credit for alternative fuel refueling property through 2032.

The act also includes incentives to convert to zero-emission vehicles by allocating $1 billion in grants and rebates to businesses, states, tribes, and municipalities to replace Class 6 and Class 7 heavy-duty vehicles—such as transit buses—with vehicles that emit zero exhaust emissions. Additionally, the act created a new business tax credit increase from 15 percent to 30 percent of the cost of certain commercial clean vehicles.

Expansion and Bus Stop Regulations

Proponents of intercity buses highlight the service as a low-cost, comfortable alternative to driving personal vehicles and traveling by air. Opponents point to the disruption large buses cause to the local traffic network, increased sidewalk congestion, and pollutants that idling buses emit into the air. To counterbalance the negatives, cities often regulate where and when private buses may load and unload passengers.

Some cities, including Atlanta, Chicago, New York, Philadelphia, and Washington, DC, require intercity bus operators to obtain a permit for loading or unloading passengers on city streets. These jurisdictions require applicants to submit information about the bus operator along with detailed schematics and information about the proposed stop location. Atlanta and Washington, DC, specifically require proposals detailing how the company will ensure orderly queuing of passengers and trash management. The decision to issue a permit for a particular location takes into consideration vehicular and pedestrian traffic, public health, safety, and the impact on local residents and businesses. Suburbs and cities with less traffic may forgo permits altogether and instead designate certain loading zones on the street for intercity buses to board and discharge passengers.

Some cities prefer that intercity buses not use the public streets for passenger loading and unloading. For example, because of enforcement efforts by the City of Boston and a 2004 ordinance, commuter buses have moved their operations to the South Station Bus Terminal (*14*). Smaller jurisdictions, such as Jacksonville, Florida, ban curbside loading and unloading and require that such services maintain a terminal for this purpose.

Airports generally have wide latitude to control ground transportation services and regulate where different types of vehicles may drop off and pick up passengers, sometimes requiring a special permit to provide service. Park-and-ride and commuter lots that are part of a state highway system also may require authorization to use the lot as a bus stop. State and local idling laws may further curb bus operations while waiting for passengers (*15*).

Bus operators looking to expand services into new markets can educate themselves on the local regulations that could make or break their businesses. What is permissible in one city may require a permit and payment of a fee in the next. Companies with innovative or experimental business models that have difficulty fitting into existing regulations may need to work with cities to find creative solutions for compliance, such as through pilot programs or temporary authorization to demonstrate the service.

Intercity Bus of the Future

There are a few things for intercity bus companies to consider when thinking about the future. Companies that reevaluate service demand as travel patterns change have an advantage. Operators could expand their customer base with new offerings for commuters and those seeking a luxury ride. Operators also may consider how they fit into the policy goals of the cities where they operate. Cities could study how buses may help to achieve policy goals, such as by reducing traffic congestion and greenhouse gas emissions as well as enhancing the economy. In the long term, a more holistic approach to city and transportation planning may be beneficial.

Cities deciding how to allocate a limited resource like curb space may review policies to redesign streets to promote walking, cycling, and other micromobility options such as scooters. These competing modes can be at odds with the desires of bus companies and those who use intercity buses. Post-pandemic planning will include decisions on whether to make open street redesigns permanent and where to place bike lanes, bus lanes, electric vehicle charging infrastructure, and locations for bus stops. Although buses are regarded as more efficient than single-occupancy vehicles for moving people in and out of cities, decisions on

where to locate on-street bus stops are an integral part of a master plan. The strategic deployment of intercity buses with input from stakeholders can be a powerful part of a comprehensive transportation paradigm.

Despite the economic benefit of bus lanes and stops, when local residents and businesses oppose bus stop locations, planners are faced with balancing competing interests while accounting for safety, convenience, economics, and equity in the process (*16*). Through planning, studies, and data, cities can address the concerns of local residents and businesses and demonstrate the potential economic benefits of better-designed streets that include intercity buses.

Cities are increasingly setting environmental policy goals to reduce greenhouse gas emissions. To further help cities meet these often ambitious goals, cities could use incentives for preferred bus stop locations in exchange for clean air commitments, electric vehicle charging infrastructure, and equity considerations. For example, access to gate space at bus terminals or desirable on-street locations could be given to bus services that build electric vehicle charging infrastructure or have a minimum number of electric vehicles in their fleets. Another consideration could be preferential access conditioned on serving underserved or low-income communities.

The intercity bus industry has proven that it is capable of evolving and adapting to changing times. The pandemic changed the way many businesses throughout the world operate, and the intercity bus industry was not immune. While a full recovery has not yet occurred, ridership is steadily increasing and operators are adding more routes and new services. With continued innovation and adaptation to meet the needs of passengers and cities, intercity buses could be poised to come back stronger than before.

Jim Henderson, WikiMedia

Electric bikes charge in the curb lane, ready for new riders on New York City's West 55th Street. During the COVID-19 pandemic, electric bikes gained popularity because the rider did not share confined airspace with other commuters. Post pandemic, demands for curb space have increased.

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