Photo: Ryan Johnson, City of North Charleston

The Decline and Revival of Intercity Bus Service

JOSEPH P. SCHWIETERMAN

The author is Director and Professor, Chaddick Institute for Metropolitan Development, DePaul University, Chicago, Illinois, and coauthor of an annual year-in-review of the intercity bus industry.

For potential riders, free Wi-Fi access has raised the profile of commuter, regional, and intercity bus travel.

A resurgence in intercity bus service is changing commercial competition for travelers between many cities in the United States. A bevy of new curbside operators—including BoltBus, Go Buses, and Megabus—are rejuvenating a sector regarded as "a mode of last resort" only a decade ago. The new services are making significant changes to downtown-to-downtown routes of 125 to 350 miles—distances considered too short for airline trips but uncomfortably long for driving.

Several factors are spurring the intercity bus phenomenon. Airport hassles, aggressive pricing strategies, and an infusion of overseas capital are important contributors. A revival of downtown districts in many cities—and a growing interest in an urban lifestyle—appear to be part of the mix, as are the expanding capabilities of personal electronic technology, such as travel apps that make ticket purchases easier. Energy-efficient bus travel also gained appeal with the dramatic escalation of fuel prices, which made single-occupant driving less affordable—although this factor has subsided recently as oil prices have plummeted.

The increase in bus travel has raised issues for transportation planners and researchers—notably, curbside congestion during arrivals and departures, the safety of the so-called Chinatown carriers, and the diversion of traffic from state-supported rail services. Some planners continue to be caught off guard, having watched the intercity bus sector decline in the

30-year period before 2006, when Megabus aggressively entered the U.S. market and helped orchestrate the turnaround.

During the industry's decades-long period of retrenchment, Greyhound Lines, various Trailways operators, and small "mom and pop" carriers gradually eliminated less-traveled routes and pared back frequencies. Many large downtown terminals built in the early post–World War II period—a time of optimism about intercity bus travel—were shuttered in favor of smaller facilities, often located in less central areas. To many, the bus was a viable choice only when all other options had failed.

Delayed Reaction to Deregulation

The industry's recent turnaround has followed a pattern that differs from that of other transportation modes after deregulation. In 1982, regulatory reform allowed bus lines to enter and exit routes freely and to compete on prices, but the changes did not spark the innovations and the efficiency improvements that occurred in airlines and rail freight.

Redefining Routes

No major new carriers entered the scene during the next 20 years. Greyhound—by far the largest carrier—suffered from strained labor–management relations and had to downsize before bankruptcy proceedings led to a reorganization. Increases in car ownership and heightened competition from airlines delivered fatal blows to many longer-haul bus routes. By 1995, some large cities, such as Cleveland, Ohio, had fewer than two dozen daily bus departures.

Major bus lines complained about unfair competition from Amtrak. In some cities, bus lines sought to strengthen the connecting opportunities available to passengers by moving into consolidated transportation centers with Amtrak and local transit providers. Amtrak, in turn, elevated the role of its Thruway bus system, creating a synergy with feeder bus operations that continues today.

The once-lucrative routes of the Northeast Corridor (NEC) underwent smaller reductions in service than routes in other regions, but the warning signs were abundant. In response, Greyhound entered a "pooling arrangement" with Peter Pan Bus Lines and Trailways of New York to serve the NEC and other Eastern routes jointly, to improve the competition with airline shuttles and Amtrak. The three bus carriers coordinated schedules and offered consumers an array of departure times.

The Curbside Model

By 2000, indications of a turnaround appeared. Among the most notable signs was the introduction and expansion of Chinatown bus services on the East Coast. A large number of daily bus trips involved travel to and from the Chinatown district in lower Manhattan. Generally owned and operated by Asian businesses, the carriers loaded and unloaded at the curb—a practice permitted by federal law—at bargain prices.

A few Chinatown owners achieved sufficient ridership gains to upgrade their waiting rooms in restaurants and stores adjacent to the curbside stops to dedicated storefronts. Some became notorious for their cat-and-mouse games with regulatory agencies concerned about safety.

Although Greyhound and Peter Pan suffered from the competition, the Chinatown services greatly expanded the number of passengers traveling by bus. The initial focus had been to serve immigrant groups

Photo: Ricky Courtney

An Amtrak California Thruway Motorcoach at Bakersfield station. In the 1990s, Amtrak strengthened its Thruway bus system, connecting with feeder bus operations.

Photo: Steven Pisano, Flickr

Travelers line up for an intercity bus in New York's Chinatown. The so-called Chinatown bus services pioneered the low-cost curbside model of intercity transportation, which gained popularity in the early 2000s.

Photo: Tom Simpson, Flickr

As Chinatown bus carriers in the Northeast Corridor expanded, other intercity bus services adapted the curbside model to compete.

and passengers on tight budgets, but these cut-rate services soon began to attract young urban professionals and travelers with larger budgets. The corporate carriers eventually copied the successful curbside model.

Nonetheless, the expansion of the Chinatown carriers in the NEC proved to be an outlier in an industry with weak passenger demand. Even rising gasoline costs and the additional fees and inconveniences associated with air travel after the terrorist attacks of September 11, 2001, did not stem the tide. As David Hall notes in his feature article (page 11), another round of cuts in the next several years left many small cities without any bus service.

Heightened Competition

With the national economy recovering and the Chinatown carriers demonstrating the potential of curbside buses, the industry began to attract large-scale corporate investment. The Scotland-based Stagecoach Group, owner of Coach USA—a set of established bus lines, mostly in the Eastern United States—and of Megabus, a bus service in the United Kingdom, moved first to test the potential of the U.S. market.

In spring 2006, Stagecoach opened a Megabus hub in Chicago, Illinois, operating mostly to points within 250 miles—although longer-haul routes, such as Chicago to Minneapolis–Saint Paul, Minnesota, proved popular. Operating from curbside at Chicago Union Station, Megabus emerged as a serious competitor with Amtrak.

Greyhound's ownership, meanwhile, passed to another U.K. company, the London-based First-Group. In early 2008, Greyhound, together with Peter Pan Lines, created its own curbside carrier, BoltBus, with a New York hub. Megabus soon established a competing New York bus operation.

FirstGroup invested heavily in Greyhound, purchasing many new buses and upgrading stations. In 2009, the company launched Greyhound Express service, featuring limited-stop service with guaranteed seating, power outlets, and later, Wi-Fi.

The stage was set for heightened competition across the country. In a sustained push to gain a foothold in new markets, Megabus established a hub in Philadelphia, Pennsylvania, in 2009, and in Wash-

Photo: Jeramey Jannene

The national curbside carrier Megabus picks up passengers near Union Station in Chicago, Illinois.

ington, D.C., the following year, while smaller carriers, such as Go Buses and Vamoose, operated side by side in the NEC.

New Frontiers

Observers wondered if the curbside bus model would be viable in car-dominated regions with thinly provided rail and bus services. In 2011, Megabus added hubs in Atlanta, Georgia, and Pittsburgh, Pennsylvania (see Figure 1, right), areas without much corridor development by Amtrak or by the Chinatown bus lines.

Greyhound affiliate BoltBus added the Pacific Northwest to its network in 2011 and California in 2013. By 2014, Megabus double-deckers were traveling new bus routes in California, Florida, and Texas. Greyhound grew more aggressive in defending its turf against Megabus, often launching a Greyhound Express service whenever Megabus initiated service in a region. Chinatown carriers experienced a decline in response to the new competition and to federal safety crackdowns.

The aggressive expansion gave value-conscious travelers the widest variety of ground-transportation options in many years. In the Seattle–Portland market of the Pacific Northwest, for example, BoltBus offered nine daily trips in each direction, compared with Amtrak's five and Greyhound Express' four (Figure 2, lower right). The discount bus line, however, did not make intermediate stops—a change from its NEC routes—but focused on endpoint-to-endpoint travel.

Answering Demands

The rapid expansion of city-to-city express carriers contributed to public pressure to address safety and aesthetics. The large numbers of buses at curbside locations raised concerns, and public agencies in some cities either encouraged or demanded the carriers to move to off-street locations. BoltBus and Megabus relocated in response to a Boston ordinance and in New York, Washington, D.C., and several other cities voluntarily moved to an off-street location.

Much of the explosive growth of curbside service was attributable to discount prices. Just as fares on conventional Amtrak trains generally undercut air fares, bus fares generally are less than those for trains—often approximately 30 percent less. The difference tends to be greater in the NEC and somewhat less in other parts of the country. In the past year, the differences appear to have shrunk somewhat, but demand has been sufficient for both the intercity bus lines and Amtrak to experience simultaneous growth in traffic.

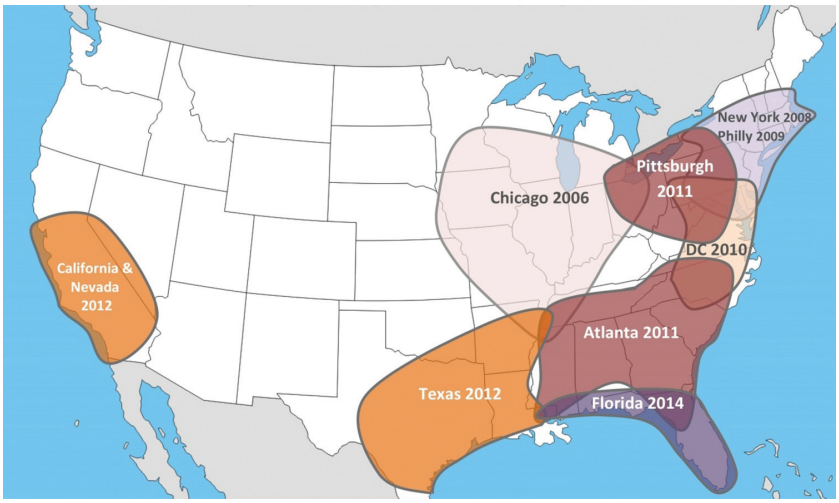


Figure 1 Development of Megabus hubs and service areas, with approximate geographic range of service.

Surveys suggest that most passengers prefer to travel by rail than by bus when price and other factors are equal. Trains offer a more spacious environment and more room to maneuver than buses can provide. The popularity of bus travel, however, appears to be fueled by the opportunity for travelers to use their time on the bus productively. Onboard bus observations show a dramatic growth in the use of personal electronic devices between 2011 and 2014, suggesting that passengers are increasingly using the onboard time to multitask.

Figure 2 Amtrak, BoltBus, and Greyhound Express service on the Portland–Seattle route, 2015.

Photo: MrTinDC, Flickr

The old Washington, D.C., Greyhound and Peter Pan bus terminal, located near Union Station, was cramped and inconvenient for pedestrians and travelers connecting from Amtrak. The terminal was torn down and Greyhound, BoltBus, and other intercity carriers now operate from inside Union Station.

Industry Size

No centralized data set allows for accurate measurements of the intercity bus renaissance. Aggregate-level and route-level data are available for rail passenger and air travel, but intercity bus carriers are not required to report traffic statistics. Although carriers must report the number of buses and bus miles they operate to the federal government, the release of the data is on a delay and does not include passenger counts. "Deadhead" or out-of-service miles and—in some cases—nonscheduled or charter operations are included in the statistical reports, confounding analysis.

As a result, consultancies such as AECOM and Resource Systems Group (RSG) have evaluated bus schedules to estimate the size of the sector. DePaul University has a small team that annually measures the number of daily schedules operated by approximately 115 intercity bus companies. A schedule is a specific origin–destination pair, which is assigned a unique number in a timetable, like an airline flight—but unlike airline flights, a bus schedule can entail several dozen stops, making analysis of bus networks difficult.

Estimates suggest that approximately 5,000 intercity bus trips are scheduled each weekday in the United States—an increase of about 35 percent since 2006. The agglomerated data from a variety of sources, including company annual reports and onboard passenger counts, indicate that these buses handle an estimated 62 million passengers annually, according to DePaul research findings; this total excludes travel by airport shuttle buses or by intercampus, public transit, and casino services. Estimates by AECOM and RSG differ but are of the same approximate magnitude. In comparison, Amtrak handles about 31 million passengers annually, and scheduled airlines handle around 650 million.

Photo: Richard Bauer, Flickr

Turimex buses provide long-haul services from cities near the U.S.–Mexico border.

Types of Service

Most intercity bus lines fall into four groupings:

- **Conventional bus lines** operate primarily from terminals in the downtowns of major cities and usually participate in agreements to "interline" passengers—that is, allow connections between buses operated by different carriers with a single ticket. Greyhound Lines, various Trailways units, and Jefferson Lines are notable players in this sector, which accounts for approximately 40 to 42 million riders.
- **Express city-to-city, or curbside, operators** emphasize downtown-to-downtown service between major cities and rely primarily on Internet ticketing.

These carriers handle 12 to 13 million riders annually and generally do not make interline arrangements. Examples are Boltbus, Megabus, and Go Buses.

◆ **Chinatown operators,** generally Asian or Asian-American businesses, run between Chinatown districts in major cities, typically in buses without a company logo. A higher degree of uncertainty surrounds this sector—for example, carriers often do not publish traditional timetables. Many Chinatown carriers recently have been shut down, but a modest comeback appears to be under way. This sector handles perhaps 2 to 3 million passengers annually.

◆ **Latino operators** offer services oriented to Spanish-speaking populations. Tornado Bus, Turimex, and Tufisia are among the largest in this group, which emphasizes long-haul service from cities near the U.S.–Mexico border. Because of the issues surrounding immigration policy, many of these carriers keep a low profile. This sector handles perhaps 4 to 5 million passengers each year.

The data suggest that since 2006, bus service has expanded much faster than air and rail service. Bus ridership also appears to have grown at a faster rate than for air and rail, although substantiating this claim is difficult. The past 15 months, however, have raised difficulties—with gasoline prices falling, the sector's growth has slowed dramatically.

New Amenities and Apps

City-to-city express or curbside lines, once dominated by young people traveling between major transit-oriented cities or college campuses, have attracted an ever-widening range of passengers. Personal business and commuter trips appear to be growing, as does travel by senior citizens. The number of business travelers, however—such as those on expense-reimbursed trips—appears to remain low, and families traveling with children are also uncommon.

Luxury Services

New luxury services are entering the fray and are expanding the base of business travel. In Florida, Red Coach, concentrating on the Miami to Jacksonville and Tampa routes, offers dedicated first- and business-class buses, with flat screens at every seat.

Vonlane launched a first-class service between Austin and Dallas, Texas, in 2014 and recently added Houston to its network. The buses have only 16 seats, but feature Wi-Fi and an on-board attendant who serves snacks and drinks. Fares cost approximately $100 each way, slightly higher than advance-purchase airfares but much lower than walk-up fares. Vonlane targets travelers who previously had flown via Southwest Airlines.

PHOTO: VONLANE

Vonlane bus service in Texas bills itself as "a private jet on wheels."

The luxury-oriented Royal Sprinter recently began four daily roundtrips in the crowded New York–Washington, D.C., market. The concept of a higher level of bus service is not new to the NEC, with such providers as Limoliner in Boston, Vamoose Gold in the Washington, D.C. area, and Dartmouth Coach in New England. Royal Sprinter, however, offers a first-class service with only eight seats on board and uses coaches that are somewhat smaller than the norm.

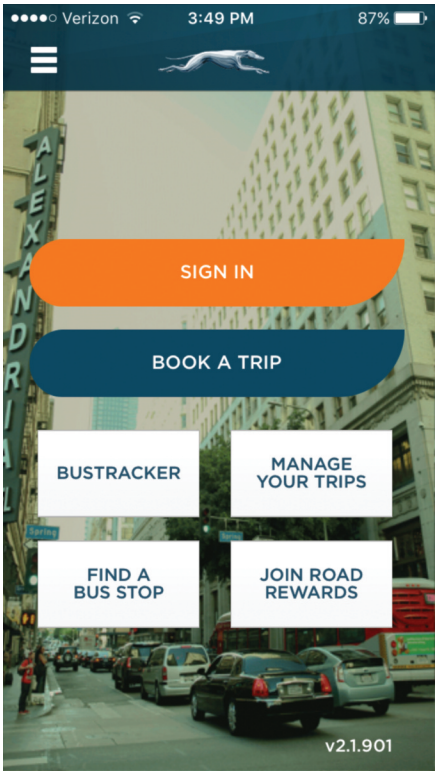
Wi-Fi and Websites

Larger, more established bus lines are also investing in amenities. Last autumn, Greyhound began publicizing the availability of power outlets and Wi-Fi on every bus, and Megabus expanded its reserved seat program to a choice of 20 seats, including some at tables. Both lines are offering bus tracker apps that project accurate arrival times.

Sophisticated travel booking websites—notably Wanderu.com and Busbud.com—are offering higher-income travelers a convenient means of comparison shopping for bus travel. By aggregating booking information for buses, the websites allow for searches similar to those of Orbitz and Travelocity for air travel.

Wanderu now covers more than 80 percent of the United States and partners with BoltBus, Megabus, Greyhound, and other major carriers. Its search tools provide point-to-point directions, so that travelers can walk, bike, or drive to and from the bus stops.

In 2014, Busbud entered a formal partnership with Greyhound. Busbud operates on a worldwide scale and lists more than 1 million departures each week across 89 countries, in 11 languages, for nearly 1,500 operators worldwide.



The Greyhound app offers a bus tracker function.

Booking data from Wanderu suggest that bus travelers crave flexibility. More than half of the ticket purchases through the system occur less than two days before the departures. This suggests that rigid airline ticketing rules may be pushing some travelers to buses.

BestBus, Megabus, and Vamoose have added website features that allow customers to change reservations for $10 or less, plus any difference in fare—far less than the $200 fee that some major airlines impose for changes in flights. BoltBus charges a fee of $4.50 for changes made via phone.

Building on Synergies

The vitality of the intercity bus sector, particularly of city-to-city express carriers, suggests that this mode will continue to command the attention of planners and researchers. State governments are expanding programs to build synergy between bus travel, intercity rail, and public transit networks. Programs in Colorado, Massachusetts, and Oregon are under way to build networks for convenient connections between points throughout the state.

The sharp decline in fuel prices in the past 2 years has slowed the rate of growth in bus travel dramatically. Cheap gas has offset the advantages of the high level of fuel efficiency of bus travel, which can exceed 175 passenger miles per gallon when buses are fully loaded. Whether the full extent of the intercity bus network is viable at the current price of crude oil remains to be seen. Some routes already have curtailed frequency.

Another concern is traffic congestion. Research by the Texas A&M Transportation Institute shows that traffic levels are rising sharply in some major cities; this makes bus operators susceptible to delays, particularly in densely populated regions, such as the NEC. Bus travelers are accustomed to delays on routes to and from New York and other traffic-clogged cities. Crowding at curbside locations is another constraint that limits growth during peak periods.

Yet the growing synergy between bus travel and carsharing and ridesharing services—such as those offered by UberPool and Lyft Line—offers an occasion for optimism. With technological innovations, planners and app developers are shaping a world in which travelers can access an integrated network of intercity coaches, minibuses, vans, and small vehicles, providing neighborhood pickup and drop-off with a single click. The possibilities bode well for a sector dismissed as a mode of last resort only 20 years ago.

Photo: Lindsay, Flickr

The fuel efficiency of bus travel can exceed 175 passenger miles per gallon when buses are fully loaded; declines in prices can slow the growth in bus travel.