

The Intercity Bus Rolls to Record Expansion:

2011 Update on Scheduled Motor Coach Service
in the United States

Chaddick Institute for Metropolitan Development



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Key Findings

1. The intercity bus was the sole major long-distance passenger transportation mode that grew appreciably in 2011. Daily bus operations expanded by 7.1%, a marked increase in the annual growth from previous years.
2. “Curbside operators,” led by BoltBus and Megabus, grew at a particularly rapid rate, expanding the number of departures from 589 to 778, a 32.1% increase.
3. Passenger traffic on curbside operators grew by approximately 30%. In absolute terms, we believe this represents the largest expansion of passenger traffic on curbside operators since the sector emerged as a significant transportation mode in 2006.
4. Evidence suggests that the two largest Megabus.com hubs, Chicago and New York, are now profitable, indicating that the core business model is financially sustainable.

Introduction

Rising awareness of new services, escalating fuel costs, and a modest economic recovery during the latter part of the year allowed the intercity bus industry to accelerate its rate of growth in 2011. Curbside operators, most notably BoltBus and megabus.com (Megabus), introduced a number of new routes this year, while Greyhound expanded its premium “Express” service. This expansion, coupled with increased marketing efforts, led to heightened brand recognition and a growing public acceptance of bus travel.

This Chaddick Institute Briefing, the fourth in a series of annual updates, summarizes changes to the intercity bus sector during the 2011 calendar year. The report specifically measures:

- the expansion of the intercity network between the 4th quarters of 2010 and 2011;
- the success of initiatives undertaken by traditional bus lines as well as “curbside operators; and
- the industry’s rate of growth relative to other modes of transportation.

Research Findings

The analysis below is based on measurements of the changing number of regularly scheduled bus operations between U.S. cities from December 2010 through December 2011. The analysis excludes “Chinatown” operators, commuter buses, and airport shuttle services. The summary is based on the number of bus operations on Fridays, one of the busiest travel days of the week.

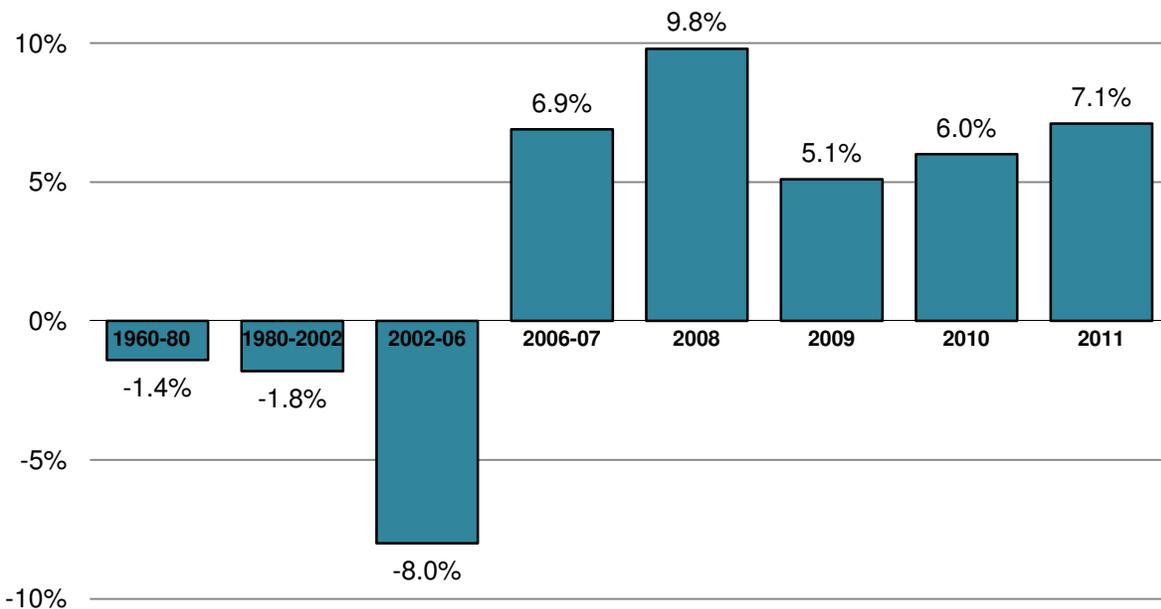
Readers should refer to the appendix of this report for a summary of the methodology. Those interested in the general decline and recovery of intercity bus services over the past half-century should consult *The Return of the Intercity Bus: The Decline and Recovery of Scheduled Service, 1960 – 2007*, a Chaddick Institute study published in 2008 (available at las.depaul.edu/chaddick).

The following five conclusions warrant particular attention:

- 1) Intercity bus operations grew by 7.1% between 2010 and 2011, illustrating that an upturn has occurred in a sector that was already experiencing brisk growth at the end of last year. (By comparison, the industry grew by 6.0% from 2009 to 2010).**

The growth that began in 2006 has continued uninterrupted, with this year’s expansion measurably higher than the past two years (Figure 1). Between December 2010 and December 2011, the cumulative number of weekday bus departures grew from 2,514 to 2,693, a 7.1% increase.

**Figure 1:
Changing Level of Intercity Bus Service**
Percentage Annual Growth of Decline



Conventional bus lines, such as Bieber, Greyhound, Peter Pan, and Trailways, kept their seat capacity largely unchanged. Cumulatively, these operators held their daily departures steady, trimming the schedule by 10 daily departures, from 1,925 in 2010 to 1,915 in 2011. A variety of enhancements, however, suggest that these carriers are participating in the industry's recovery:

Greyhound Express: Greyhound Express service, which provides guaranteed seating, free Wi-Fi, power outlets at every seat, and new waiting areas in stations, first became available in late 2010. This year, the service was introduced in additional markets: from Chicago to Indianapolis, Champaign, Cincinnati, and Milwaukee and from New York City to Boston, Philadelphia, and Washington, D.C. This service also became available from Atlanta to Savannah, Birmingham to Memphis, Philadelphia to Pittsburgh as well as numerous routes departing from Richmond, Virginia.

Altogether, Greyhound added 38 daily departures to its national route system in 2011, with most of the growth attributable to the expansion of Express service. In the Northeast, many of the Express routes are operated as part of a pooling arrangement with Peter Pan Lines. While the provision of Express services on most routes resulted in new departures in existing cities, some conventional service routes were replaced with Express service, as in the New York to Washington route (Table 1).

Further expansion of the Greyhound Express product line appears imminent. Liberum Capital, an investment research firm based in the United Kingdom, estimates that Greyhound Express will handle five million passengers in 2012, up from about four million this past year. Based on our 2011 numbers, this projection appears reasonable.

**Table 1:
Service Changes on Greyhound Express Routes**

Total Daily Trips (In direction indicated):

<u>Route</u>	<u>November 2010</u>	<u>December 2011</u>
Atlanta – Savannah	4	4 (includes 2 Express)
Chicago – Indianapolis	6	9 (includes 3 Express)
Chicago – St. Louis	5	7 (includes 3 Express)
Chicago – Twin Cities	5	8 (includes 5 Express)
New York – Washington, D.C.	19	18 (includes 11 Express)
Philadelphia – Pittsburgh	5	8 (includes 3 Express)

Source: Russell's Official National Motor Coach Guide

Station and Amenity Enhancements: Conventional bus lines invested heavily in new stations and conveniences. The unveiling of Greyhound's new LEED certified terminal in Sacramento, the largest station the carrier has built in years, is particularly newsworthy. The sale of its station in the nation's capital and relocation of operations to Washington Union Station (which also serves as the Megabus terminal) similarly reflects the carrier's heightened efforts to modernize its facilities. The carrier also entered a partnership with 7-11 stores to allow passengers to pick up tickets and pay with cash without traveling to (or arriving early at) the bus station. In addition, Greyhound installed power outlets on many more buses and invested in new waiting areas for Express passengers.

Selected additions and reductions by smaller carriers: Smaller conventional bus companies were also on the move this year, with Jefferson Lines particularly ambitious, expanding (by our estimate) from 51 weekday departures in 2010 to 70 in 2011. The carrier added a new express service on the Minneapolis to Fargo route and developed a "Rocket Rider Service" that shortened travel time from Minneapolis to Duluth, Kansas City, and Fargo on Wi-Fi equipped buses.

Prestige Bus Lines launched its BeeLine Express over two routes from Wichita, KS to Pueblo, CO and Salina, KS, complementing its services provided in conjunction with Greyhound. Peoria Charter Coach, an Illinois-based company, added a new route with six daily trips from Champaign to Normal, IL, and on to Chicago's major airports, bringing the weekday total to 17 departures.

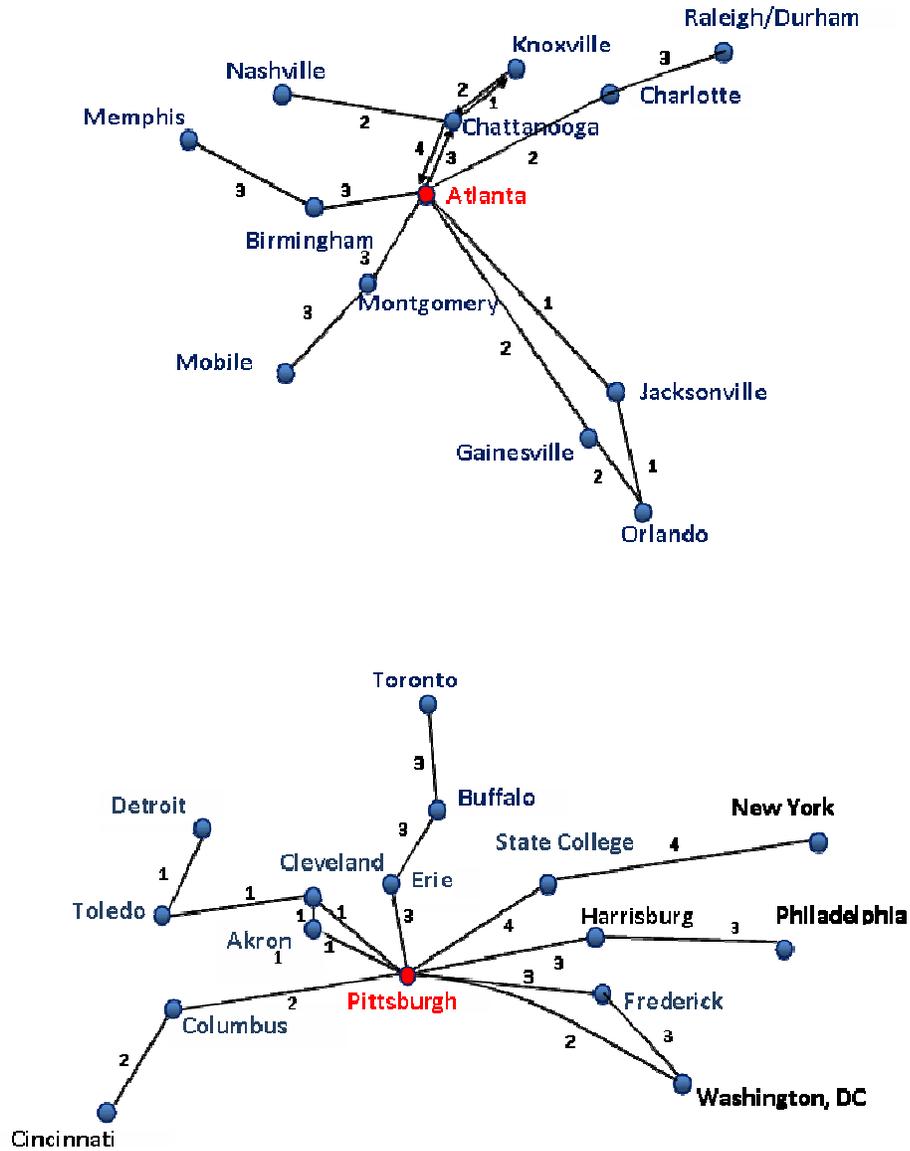
A variety of service reductions also took place. Last summer, Runways Transportation, for example, ceased operations, ending its service from the Jacksonville and Orlando airports (with stops in Gainesville and other cities) due to increasing gas prices and decreasing passenger travel. Various Trailways lines also marginally reduced service in 2011.

2) Curbside operators expanded daily bus operations by 32.1% in 2011, primarily due to the addition of three new hubs. Curbside operators now account for 778 daily bus operations in the continental United States, up from 589 last year.

The significant growth of curbside services was attributed primarily to the creation of three new hubs and incremental expansion from established hubs. Curbside operators, which avoid traditional stations in favor of curbside pickup while emphasizing internet ticketing and express

service between major cities, have been one of the country's fastest growing intercity transportation sectors in recent years.

Figure 2: Route Map of Megabus Atlanta and Pittsburgh Hubs
With Frequency of Service in Each Direction
 Schedules effective December 2011 for travel on Friday, Jan. 6, 2012

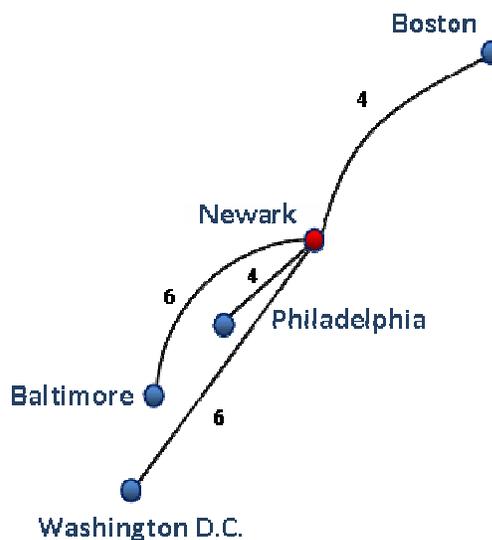


New Megabus and BoltBus Hubs: On May 11, 2011, Megabus established its fifth hub in Pittsburgh, instituting a stronger market presence in the densely populated region between the East Coast and Midwest (Figure 1). This hub offers 38 weekday arrivals and departures, although its creation resulted in only two new cities, Akron, OH and Erie, PA, being added to the route network, with the remainder of other cities in the region already being served from hubs in Chicago, New York, Philadelphia, and Washington, D.C.

On June 14, BoltBus created a new hub in Newark, offering nonstop service to Baltimore, Boston, Philadelphia, and Washington, D.C (Figure 2). This hub, with 40 daily bus operations, is less than 20 miles from the carrier’s New York hub, enhancing that carrier’s already-strong position in the metropolitan region. The two hubs are entirely distinct operations.

On November 16, Megabus commenced operation in Atlanta, establishing the company’s lone connecting point south of the Mason Dixon line. (The carrier briefly operated a hub in Los Angeles starting in 2007 but ceased operations soon after). The Atlanta hub has 29 daily arrivals and departures serving 11 cities: Birmingham, Charlotte, Chattanooga, Gainesville, Jacksonville, Knoxville, Memphis, Mobile, Montgomery, Nashville, and Orlando. All but three of these cities are new to the Megabus system. Megabus also added routes from Boston to Burlington, VT, Hartford, CT, and New Haven, CT, thus creating a mini-hub in the Massachusetts city.

Figure 3: Route Map of BoltBus’ Newark Hub
With Frequency of Service in Each Direction
 Schedules effective December 2011 for travel on Friday, Jan. 6, 2012



Incremental Expansions at Existing Curbside Hubs: Expansion at established Megabus hubs included new Chicago to Omaha and New York City to Binghamton, NY service, as well as trips from Memphis to St. Louis. BoltBus added Philadelphia to Boston service via Newark, thus following the lead of Megabus by establishing routes bypassing New York City.

These expansions and the new hubs brought the number of daily BoltBus and Megabus departures to 202 and 460, respectively.

Smaller Curbside Operators: Smaller curbside operators also expanded, particularly in the Northeast. By our latest count, there are now at least eight such carriers, not including Chinatown operators. Several of these operators, including Limoliner, Lux Bus America, and New York Shuttle, offer enhanced amenities in spacious seat configurations. The number of daily bus operations on these carriers, however, remains relatively small (Figure 2).

Table 2:

Daily Operations by Smaller Curbside Operators
Weekday Departures, December 2011

	<u>Bus Operations</u>	<u>Daily Routes</u>
California Shuttle Bus	4	Los Angeles – San Francisco
DC2NY Bus	12	New York – Washington/No. Virginia
Limoliner	6	Boston – New York
Lux Bus America	2	Los Angeles – Las Vegas
Tripper Bus	16	New York – Bethesda, MD/No. Virginia
New York Shuttle	2	Charlottesville, Virginia – New York
Vamoose	24	New York – Washington D.C. area
Washington Deluxe	18	New York – Washington, D.C.

**Based on ticketing in December 2011 and for travel on Friday, January 6, 2012*

In the West, USAsia Bus Lines grew dramatically in 2011 but is not included in these counts since it is a Chinatown service.ⁱ Curbside service is not yet available between points west of Omaha, and east of Las Vegas. Although conventional operators and lines oriented toward airport or casinos passengers provide scheduled service—with some routes extending hundreds of miles—the absence of curbside routes, defined as running downtown to downtown, is noteworthy. Megabus has expressed interest in serving Texas or returning to California but has made no moves toward this effort in the past year.

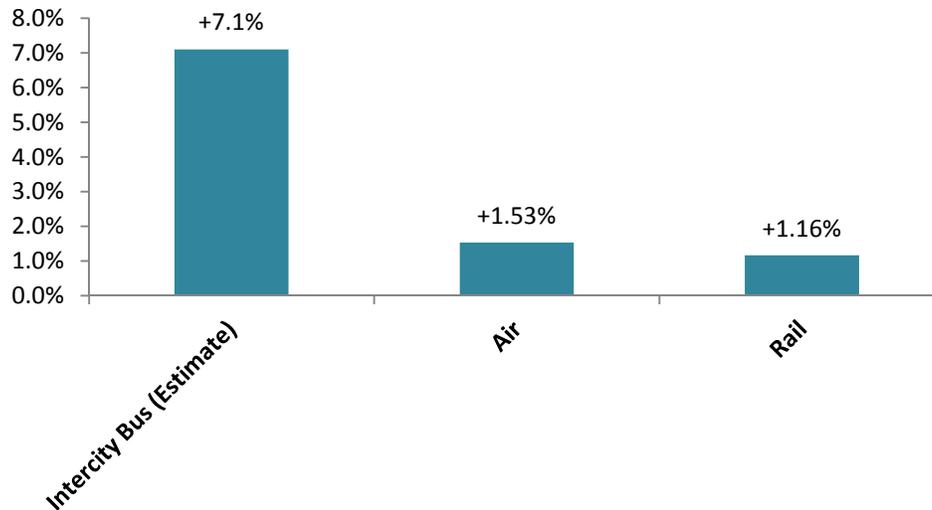
3) The intercity bus was the only intercity mode to grow appreciably in 2011, making it the fastest growing form of intercity transportation for the fourth year in a row.

This marks the fourth consecutive year that scheduled bus service grew faster than other modes of intercity transportation. The capacity of schedule operators on most modes of transportation systems remained virtually unchanged.

Airlines slightly reduced flight departures, decreasing scheduled offerings by .34% through October (the most recent month for which data is available), while modestly increasing the number of available seat miles over this period by 1.5% (Figure 4). Rail services remained virtually unchanged, despite investments in higher-speed systems. Amtrak’s train-miles declined by 1.1% through October, while its seat-miles rose by 1.2%. As previously noted, the amount of bus service, measured by the number of departures, grew by 7.1%. (See Finding 4 below for a discussion of changes in automobile travel, which has experienced a 1% year-over-year decline).ⁱⁱ

**Figure 4:
Changes in Service Level by Mode**

Annual Change - 2011 vs. 2010



Based on most recent data available. Airline and rail comparisons are year-to-date through Sept. 10 vs. same period previous year. Bus data is estimated year-to-date through November 2010.

The Chaddick Institute is currently measuring the number of bus-miles and route-miles operated by curbside carriers to allow for a more refined analysis of capacity changes, but we anticipate that the rate of growth for these measures will be similar to the rate of growth for daily bus departures.

- 4) The ridership on curbside buses during the 4th quarter of this year appears to be at least 30% higher compared to the same period last year. Megabus has reported 28-35% ridership growth on the system in a major financial publication released on December 4, 2011.**

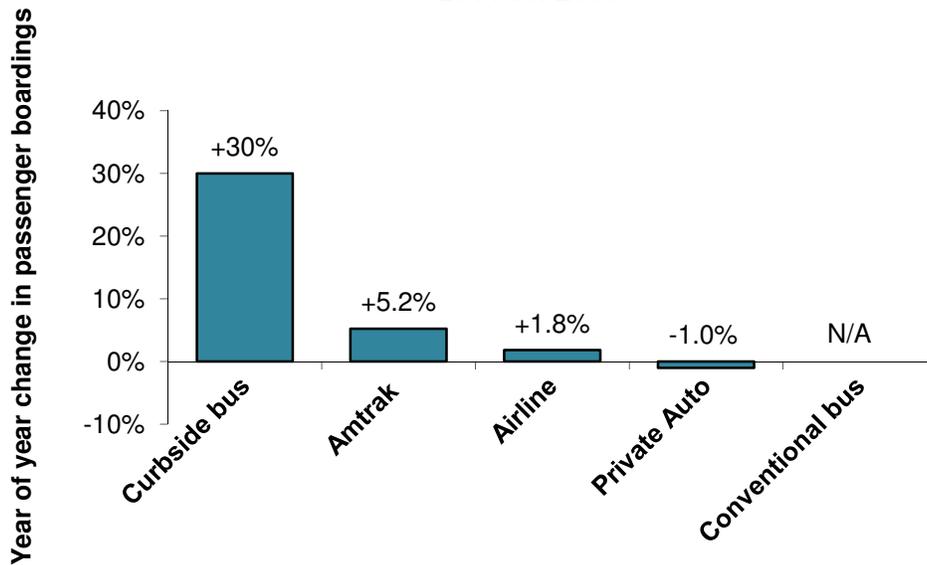
Accurate passenger traffic statistics are not available for the intercity bus sector due to the fact that no federal government agency compiles and audits such statistics, as is done for intercity rail and airplane travel. Greyhound has not yet reported its official traffic for 2011; in 2010, however, it reported carrying roughly 19 million passengers.

Nevertheless, the evidence suggests that traffic for the industry has been robust. Megabus indicated in a December 4, 2011 interview in the *Financial Times* that in late 2011, its bookings were 28-35% ahead of last year.ⁱⁱⁱ Other reports put the growth at dramatically higher rates.^{iv} Liberum Capital projected that Megabus traffic would grow by 75% between the calendar years 2010 and 2011 but that this growth rate would slow down to 29% in 2012.^v

We believe that 30% is a conservative middle-ground estimate of the growth in curbside traffic between 2010 and 2011 (Figure 5). Amtrak and commercial airline passenger boardings

were up far less, by 5.2% and 1.8% respectively, over the year-to-date. Automobile traffic declined by 1% through September. More recent data is not available.

**Figure 5:
Estimated Growth in Passenger Ridership
2011 vs. 2010**



Based on most recent data available. Airline and rail comparisons are year-to-date through Sept. 10 vs. same period previous year. Bus data is estimated year-to-date through November 2010.

5) Megabus’s largest hubs, Chicago and New York, are reported to be profitable, while BoltBus appears to be, at a minimum, financially self-sustaining, if not also profitable.

Financial disclosures by Stagecoach, the holding company of Coach USA, which operates most of the U.S. Megabus system, indicate that the Chicago and New York hubs enjoyed healthy profit margins, with cumulative profits of \$13.6 million between April 2010 and April 2011. The operating margins for Chicago and New York, as reported by Liberum, were an impressive 22.7% and 18.6%, respectively.^{vi} Although the carrier’s newer hubs in Philadelphia and Atlanta had not yet broken even, the system as a whole was reported to be profitable.

The financial performance of BoltBus and other curbside carriers have not been publically disclosed, although it is worth noting that BoltBus has operated without interruption for nearly four years, has a well-capitalized parent company, and has made gradual expansion to its overall system—all signs that they are doing well from a financial standpoint. A study by Liberum finds that once hubs become well-established, carriers benefit from both greater pricing power and gradually increasing demand.

Conclusion

The growth of the intercity bus network in 2011 reflects a continued change in the dynamics of American transportation that began almost five years ago. The level of investments in new routes seems remarkable when juxtaposed with the modest changes in passenger-carrying capacity of other modes. Arguably, the explosive growth of curbside service has been the most significant change in downtown-oriented long-distance travel in more than a half-century.

Increases of fuel costs and airline ticket prices played a major role this year in making bus service appealing to the general public, especially on short-haul routes. Among curbside operators, it remains to be seen when the most recently created hubs will become profitable. It appears nonetheless that more expansion is in the works, with the California and Texas markets especially attractive for prospective entrants. At the same time, the heavy investments in Greyhound Express suggest that the recovery of the intercity bus industry is not limited to curbside operators.

These findings reinforce the observations we made earlier this year that intercity bus operators are benefitting from an increasing level of demographic diversity among its customer base and from the rising interest among travelers in being able to continuously use portable electronic technology, which is difficult or impossible when flying or driving. Please see below for links to these reports.

Interpreted broadly, the results of this study suggest that the intercity bus is again becoming a force on the intercity transportation scene. Amtrak has begun experimenting with steeply discounted fares on the Northeast Corridor that are quite similar to the special promotion fares offered by curbside operators. Greyhound appears to be winning back more affluent travelers, students, and females traveling alone—once a core part of its business—with its new premium product, and more new curbside routes appear likely to emerge in 2012.

Other Recent Chaddick Studies on Intercity Bus Service

“Privacy Invades Public Space: The Growing Use of Portable Electronic Technology on Intercity Buses, Trains and Planes”. Our national study showing how the growing use of portable electronic technology among intercity air, rail, and bus passengers is having transformative effects on travel behavior across the United States.

"Who Rides Curbside Buses: A Survey of Passengers on Curbside Bus Lines in Six East and Midwest Cities." Provides survey results from 750 curbside and conventional bus passengers in six cities, including analysis of how traffic is being diverted from other modes.

For free downloads of these studies, please visit the publications area in Chaddick Institute web site at:

<http://las.depaul.edu/chaddick>

Appendices

Appendix A: Measuring the Rate of Growth in the Intercity Bus Sector

Understanding the full extent of the intercity bus sector's decline and recovery has been hampered by the absence of data on the number of fare-paying passengers and the changing level of service provided. All available national statistics include commuter and charter bus services, which makes it impossible to isolate changes in travel on conventional scheduled intercity routes. By contrast, passenger statistics for the air and rail industries are accurately categorized, made available, and evaluated in great detail.

Measuring Growth 2009–2011: To measure growth rates during this period, the Chaddick Institute enumerated the population of bus operations in the United States. This was done by reviewing schedule information published in the *Russell's Guide* as well as those advertised on websites of carriers that do not participate in the guide. The Institute maintains a data set of weekday bus operations by curbside operators that allows for accurate year-by-year comparisons. This analysis excludes most airport shuttle operations and carriers that focus on unconventional markets such as casino traffic, linking college campuses, and non-English speaking populations moving to and from Mexico. We acknowledge, however, that the approach may miss certain smaller carriers that neither publish in the *Russell's Guide* nor have a prominent web presence.

The analysis we provide also excludes all "Chinatown operators," which have significant different qualities than mainstream operators. As a general rule, those carriers listed on the GotoBus.com web site are considered for purposes of our study to be Chinatown operators. Many of these carriers do not invest in a brand identifiable by the paint scheme or insignia on their buses. In some instances, these carriers operate in the grey area of the law. See Klein (2009) for a review of the Chinatown operators in the Northeast.

Our estimates for curbside operators this year are based on schedules advertised in December 2011 for travel on Friday, January 6, 2012. Friday was chosen as it represents one of the more heavily traveled days of the week, thus assuring that our methods captures a wider array of routes than are operated on other days of the week.

Measuring Decline and Growth 1960 – 2007: To estimate the rate of growth or decline prior to 2008, the Chaddick Institute used a random sampling approach by measuring the number of bus departures for 16 cities over time. We collected arrival and departure information from the *Russell's National Motor Coach Guide* on all routes operating through Akron, OH; Baltimore, MD; Charleston, SC; Chicago, IL; Cleveland, OH; Columbus, OH; El Paso, TX; Evansville, IN; Kansas City, MO; Louisville, KY; Minneapolis, MN; Philadelphia, PA; Portland, OR; Providence, RI; Sacramento, CA; and Washington, D.C. We supplemented *Russell's Guide* data with departure information for curbside operators, mostly notably BoltBus and Megabus, which do not publish their schedules in the monthly compendium. Information for these carriers was collected directly from their individual timetables, as reported on their websites, between 2006 (when Megabus launched service) and 2008.

Each bus departure is recorded as one entry in the data set. Assurances were made that no departure was counted more than once by sorting by bus number and making note of arrival and departure times. Eliminating such duplication was necessary due to the fact that carriers commonly list the same bus departure in several different timetables. For example, a Chicago to Minneapolis departure operated by Greyhound may appear in that carrier's Chicago to Milwaukee timetable as well as its Chicago – Twin Cities timetable since the same bus serves both markets. The resulting data set encompasses 11,400 observations of bus operations for the 2006-2008 period. Further information is available in our *Return of the Intercity Bus* report (2007).

References

- Fischer, Lauren and Joseph Schwieterman, "The Decline and Recovery of Intercity Bus Service in the United States: A Comeback for an Environmentally Friendly Transportation Mode?" *Environmental Practice*, 2011.
- Klein, Nicholas, "Emergent Curbside Intercity Bus Industry: Chinatown and Beyond," *Transportation Research Record: Journal of the Transportation Research Board*, No. 2111, Transportation Research Board of the National Academies, Washington, D.C., 2009, pp. 83–89.
- Liberum Capital, "North American Operations: The Land of Opportunity, Bus and Rail," October 10, 2011.
- Schwieterman, Joseph and Lauren Fischer. "The Intercity Bus: America's Fastest Growing Transportation Mode 2010 Update on Scheduled Bus Service". December 12, 2010.
- Schwieterman, Joseph and Lauren Fischer, "Return of the Intercity Bus: Chaddick Institute Working Paper, DePaul University, January 2008.
- U.S. General Accounting Office, *Surface Transportation: The Availability of Intercity Bus Service Continues to Decline*,GA0/RECD-92-126, June 2002.

ⁱUSAsia represents something a hybrid between conventional Chinatown operators and curbside carriers. It is not included in the analysis of daily bus departures.

ⁱⁱ Based on 2011 U.S. Department of Transportation data for the six months ending in September. For a summary, see Larry Copeland and Paul Overberg, "Economy, gas prices make Americans drive less," *USA TODAY*, November 12, 2011.

ⁱⁱⁱ Rose Jacobs, "Megabus eyes US expansion," *Financial Times*, December 4, 2011.

^{iv} Megabus has reported that its holiday-travel bookings are up 70%. See Megabus forecasts 70% increase in holiday bus travel." *Metro Magazine*, November 7, 2011. Available at <http://www.metro-magazine.com/News/Story/2011/11/Megabus-forecasts-70-increase-in-holiday-bus-travel.aspx>

^v Liberum Capital, "North American Operations: The Land of Opportunity, Bus and Rail," October 10, 2011, page 43.

^{vi}Ibid, page 45.