



2008 Update on Intercity Bus Service:
Summary of Annual Change

Chaddick Institute Policy Study

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Overview

This report is an update of *The Return of the Intercity Bus: The Decline and Rise of Scheduled Service to American Cities, 1960 – 2007*, a study issued by the Chaddick Institute for Metropolitan Development in late 2007. The earlier study describes the general recovery of the intercity bus sector since early 2006 after more than four decades of decline.

Since last year's report was released, the Institute has gradually expanded its stratified sample of historical bus arrivals and departures in major cities across the United States, creating a data set of 10,150 bus operations. As noted in the earlier study, the data includes all arrivals and departures of all conventional intercity bus companies, such as Greyhound Lines and Continental Trailways, as well as operators that rely on "curbside" pickup instead of traditional stations. (The data set does not include service by so-called "Chinatown" bus lines or commuter-bus operators).

A summary of the notable changes in service from the fourth quarter of 2007 to the fourth quarter of 2008 follows.

General Changes in Service, 2007-08

- Scheduled bus service grew 9.8% between the fourth quarters of 2007 and 2008. This marks two consecutive years of robust growth after more than four decades of persistent decline. The annualized rate of growth between the second quarter of 2006 and the fourth quarter 2007 was 8.1%. (See Table 1 for historical comparisons)
- The increase in the amount of service provided by the intercity bus sector has significantly outpaced other modes of intercity transportation. Intercity rail service, measured in train-miles, grew by 3.3% over the first eight months of 2008.¹ Over the same period, there were large declines in both domestic air service (down approximately 8% for the fourth quarter) and automobile travel (down approximately 3.3%²).
- The renaissance of intercity bus service dates to May 1, 2006, when Megabus (a unit of Stagecoach, Ltd.) introduced service to several Midwestern cities from Chicago. This regional system handled more than 180,000 passengers in the 3rd quarter, 2008.
- Most of the growth over the past year has been attributable to the introduction of new service with curbside pick-up in the northeastern states. Boltbus (a joint venture of Greyhound and Peter Pan Bus Lines) and Megabus each launched high-frequency service in spring 2007 between New York and Washington, D.C., as well as in other regional markets. Outside the Northeast, traffic on the intercity bus system has remained relatively stable.

Environmental and Economic Considerations

- The *growth* of new bus operators with curbside pick-up over the past year has reduced the carbon dioxide emissions by an estimated 36,000 tons. These estimates are based on the proportional shift in travel from less fuel-efficient modes to more fuel-efficient modes of transportation.³ More detailed calculations are available at <http://las.depaul.edu/chaddick>
- The increased demand for bus service is due in part to the escalation of fuel prices, which significantly raised the cost of air and automobile travel throughout much of 2008. Demand was also influenced by the revival of the downtown districts in major cities, higher parking costs, and the growing acceptance of bus travel among younger travelers and pleasure-oriented travelers. The combination of these factors has allowed the newest operators, most notably Boltbus and Megabus, to become self-sustaining (and on some routes profitable) only a few months after launching service in the Northeast.
- At present load factors, the new operators offering curbside pickup achieve about 150 passenger miles per gallon of fuel (based on an average load of 30 people). This is roughly four times the fuel efficiency of air travel and five times the fuel efficiency of the average single-occupant automobile.
- The expansion of the sector has reduced fuel consumption by an estimated 3.48 million gallons (a mix of gasoline, diesel fuel, and jet fuel). Detailed calculations are available at www.las.depaul.edu/chaddick

Regional Considerations

- The expansion of intercity bus service remains strongest in corridors involving major metropolitan areas separated by 175 to 300 miles in the East and Midwest. The California market has seen less growth, partially due to the strength of the state's rail-passenger network and to certain urban-design issues that make downtown-to-downtown service less convenient for many travelers. In general, the greater distances between cities in the Western United States reduces the appeal of intercity bus service which is most attractive for trips under 300 miles.
- Megabus' decision to close its Los Angeles hub in early 2008 resulted in the most significant *reductions* in service over the past year. California Shuttle Bus has partially filled the void in that state and appears poised for expansion.
- New York City has seen the greatest increase in service over the past year due to the simultaneous expansion of Megabus and Boltbus. Megabus and Boltbus now serve eleven and three cities from New York, respectively. Both launched service in the Northeast in the spring of 2007.

- There is no convincing evidence that the amount of service to small towns has appreciably increased over the past year. To the contrary, there appears to have been sporadic reductions in this service on lightly traveled routes. Some of the remaining routes are subsidized by state governments. The dramatic growth of curbside service has apparently contributed to this trend, siphoning passengers away from the more traditional hub-and-spoke network.

Trends

- A notable achievement this year by major “curbside” operators was the widespread introduction of wireless Internet service. Wireless is now available on all Boltbus and DC2NY Bus routes and on many Megabus routes. Nevertheless, certain problems with the technology (such as malfunctioning equipment) still exist and need to be resolved.
- The rising number of double-decker buses operated by Megabus (which is expanding its fleet of 81-seat double-deckers from 16 to 112) suggests that the average number of passengers per bus departure is growing.
- Although pleasure travelers, students, and travelers on personal trips are by far the largest share of the sector’s growth, there are growing indications that corporate travelers are turning to curbside operators in the Northeast. A year ago, there was little evidence that this segment was using intercity bus services to any notable extent. Data about the type of travelers using intercity bus service, however, is limited.

Notes on Traffic Growth

- The changes in *passenger traffic* handled by intercity bus operators is difficult to measure accurately because there are no standard reporting practices by the carriers. Details about this problem appear in our earlier report.
- Megabus traffic grew 97% between October 2007 and October 2008. There is evidence suggesting that traffic handled by Greyhound’s conventional bus services, however, has been relatively flat. When the traffic handled by Boltbus (created by Greyhound and Peter Pan Lines) is included, however, Greyhound has seen appreciable growth as well. Boltbus has not released system traffic numbers, but it has reported that its operation is profitable and has gradually added capacity.
- The DePaul data set was expanded this year with the addition of information on bus routes from major coastal cities, including Philadelphia, Penn., San Francisco, Calif., and Washington, D.C., since 1960. This brings the data set to 10,150 bus operations.

Additional graphics and computational details about the Intercity Bus Project are available at las.depaul.edu/chaddick. Photographs for publication available from Joseph Kearney at jkearne2@depaul.edu.

Summary Statistics

Changes in Bus Service, Annualized

<u>Period</u>	<u>Compound Annual Growth/Decline</u>
1960–1980	-1.6%
1980–2002	-4.3%
2002–2006	-10.2%
2006–2007*	8.1%
2007–2008	9.8%

* annualized rate for period from March 2006 to December 2007.

Reduction in Carbon Emissions due to Growth

33,000 – 42,000 tons (36,000 tons average estimate)

Capacity Changes by Mode, 07 - 08

	<u>Measure</u>	<u>Change (%)</u>	<u>Period</u>	<u>Source</u>
Bus	Departures	+9.8	4 th quarter 07-08	DePaul University
Air	Seat-miles	-8.0	4 th quarter 07-08	Industry data
Rail	Seat-miles	+3.3	Jan–Aug., 07-08	Amtrak.com
Auto	Vehicle miles	-3.3	Jan–Aug., 07-08	FHWA

Footnotes:

¹ Based on Amtrak system performance report, “Summary Metrics,” train-miles Jan–Aug 2008 compared to previous year. Available at www.amtrak.com/pdf/0808monthly.pdf.

² Based on federal estimates, January–August. Available at <http://www.fhwa.dot.gov/ohim/tvtw/08augvt/index.cfm>.

³ Based on estimated 22 pounds of carbon emission per gallon of diesel fuel, 19.4 per gallon of gasoline and 22.4 pounds per gallon of jet fuel. See las.depaul.edu/chaddick for details.