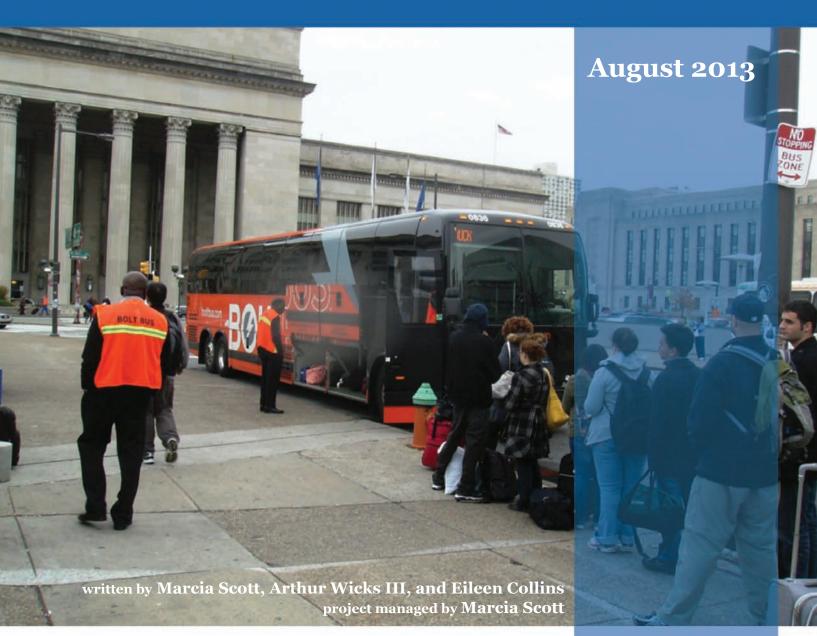
Curbside Intercity Bus Industry: Research of Transportation Policy Opportunities and Challenges



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Curbside Intercity Bus Industry: Research of Transportation Policy Opportunities and Challenges

August 2013

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Preface

Driving along Interstate 95 between New York City and Washington, D.C., it is hard to avoid seeing the brightly colored buses advertising tickets as low as a dollar. New corporate carriers like Megabus, DC2NY, and BoltBus, along with so-called "Chinatown" buses, are part of the emerging, low-cost, curbside intercity bus industry that offers rides cheaply between major cities in the Northeast. This industry now represents the fastest growing mode of intercity bus transportation in the United States—outpacing air and rail transportation.

This report from the Institute for Public Administration (IPA) at the University of Delaware (UD) serves to document the industry's unprecedented growth and related transportation policy issues within the Northeast Corridor. With project support from the University of Delaware University Transportation Center (UD-UTC), the team conducted a literature review on the intercity bus industry, a field assessment of curbside operations, survey of passengers, and a June 13, 2012 Curbside Intercity Bus Transportation Policy Forum for industry stakeholders. A case study on a local Chinatown bus company was also conducted to spotlight the alarming industry issue of reincarnated carriers—companies that have been shut down by the federal government for violating laws and regulations, yet defy enforcement by continuing to operate under other names or companies.

Outcomes from this research support the idea that the industry has the potential to expand low-cost travel options, reduce vehicle-miles-traveled (VMT), and decrease congestion in the nation's most traveled transportation corridor—the Northeast Corridor. However, despite passage of the Commercial Motor Vehicle Safety Act of 2012 within the Moving Ahead for Progress in the 21st Century Act (MAP-21), transportation policy challenges remain. Issues that need to be addressed include safety of chameleon carriers, need for greater enforcement authority of the Federal Motor Carrier Safety Administration, enforcement of Americans with Disabilities Act of 1990 requirements, management of curbside operations by cities, and need for interconnectivity with other modes of transportation. This report provides a snapshot of the current, but evolving, state of the curbside intercity bus industry. It provides a starting point for further discourse, research, and study of transportation policy as the industry continues to change and expand.

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List of Acronyms

AAPD The American Association of People with Disabilities

ABA American Bus Association

ADA Americans with Disabilities Act of 1990

AFL-CIO American Federation of Labor-Congress of Industrial Organizations

APTA American Public Transportation Association

ATU Amalgamated Transit Union

BASICs Behavior Analysis and Safety Improvement Categories

BRRA Bus Regulatory Reform Act of 1982

CDL Commercial driver license

CLP Commercial driver learner's permit

CMV Commercial motor vehicles

CO2 Carbon Dioxide

D.C. District of Columbia

DCMR District Code of Municipal Regulations

DDOT District of Columbia Department of Transportation

DHS Department of Homeland Security

DOJ U.S. Department of Justice
ELDT Entry-level driver training

EPA U.S. Environmental Protection Agency

FMCSA Federal Motor Carrier Safety Administration

FLSA Fair Labor Standards Act

FTA Federal Transit Administration

GHGs Greenhouse Gases

ICC Interstate Commerce Commission
IPA Institute for Public Administration

JFK Blvd. John F. Kennedy Boulevard (in Philadelphia, Pa.)

MAP-21 Moving Ahead for Progress in the 21st Century

MassDOT Massachusetts Department of Transportation

MCSAC Motor Carrier Safety Advisory Committee

MCSAP Motor Carrier Safety Assistance Program

NACTO National Association of City Transportation Officials

NHTSA National Highway Traffic Safety Administration

NPRM Notice of Proposed Rulemaking

NTSB National Transportation Safety Board

NYC New York City

NYCDOT New York City Department of Transportation

OOS Out of service (order)
OTRB Over-the-road bus

PANYNJ Port Authority of New York and New Jersey

RUPRI Rural Policy Research Institute

SEPTA Southeastern Pennsylvania Transportation Authority

SMS Safety Measurement System
 STB Surface Transportation Board
 SDLA State driver licensing agency

TSA Transportation Security Administration

TTD Transportation Trades Department

UD University of Delaware

UD-UTC University of Delaware University Transportation CenterUMTRI University of Michigan Transportation Research Institute

U.S. United States of America

USDOT U.S. Department of Transportation

USRC Union Station Redevelopment Corporation

VMT Vehicle Miles Traveled

WMATA Washington Metropolitan Area Transit Authority

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1. Executive Summary

"Feds Shut Down 26 Discount Bus Companies." Fatal Chinatown Bus Kills 15." "Bus-Safety Proposals have Languished for Years." "Inspectors Run Safety Sweep on Buses in 13 States." In recent years, these sensational, national headlines have highlighted policy questions about the appropriate role of transportation regulation in response to the rapid growth of the curbside intercity bus industry.

While there is no official, agreed-upon definition, curbside intercity buses are described in a 2011 National Transportation Safety Board (NTSB) *Report on Curbside Motorcoach Safety* as "those in which interstate motorcoach carriers conduct scheduled trips from one city to another city or a destination and originate or terminate at a location other than a traditional bus terminal; most of these operations pick up or discharge passengers at one or more curbside locations" (NTSB 2011 ix).

Once a declining industry, popularity of the curbside intercity bus services has been spurred by competitive prices; convenient online ticketing; the rise in "transit lifestyles;" and access to free, onboard Wi-Fi technology that caters to a younger demographic. The curbside intercity bus industry now represents the fastest growing mode of intercity travel in the United States—outpacing air and rail transportation. The Chaddick Institute for Metropolitan Development at DePaul University reports that intercity bus service grew by 7.5 percent between December 2011 and December 2012—the highest rate of growth in four years (Schwieterman et. al. 2013 2). Both so-called "Chinatown" buses and corporate intercity bus carriers have contributed to industry growth in the Northeast Corridor and nationwide. BoltBus and Megabus alone experienced a 32 percent growth in departures between 2010 and 2011 (ABA press release May 2012).

Yet rogue bus companies that put passengers at risk by operating unethically and unlawfully have marred the industry. The July 2012 adoption of the two-year transportation reauthorization bill, Moving Ahead for Progress in the 21st Century (particularly the Commercial Motor Vehicle Safety Act of 2012), establishes a strategic framework to improve the regulatory environment, provide a program of continuous improvement, and authorize greater rulemaking and enforcement authority of the Federal Motor Carrier Safety Administration (FMCSA).

In addition, state and local governments are addressing impacts of industry growth by initiating innovative approaches to manage curbside operations. To meet growing demand for service, these approaches include permitting systems, idling laws, regulating curbside conditions, leasing or privatizing curb rights, and consolidating and/or centralizing bus operations in intermodal facilities.

This report highlights the issues stemming from deregulation of the industry, its unprecedented growth, and the fragmented regulatory environment. The University of Delaware University Transportation Center (UD-UTC)—that, as a Tier II center, focuses on resiliency of transportation corridors—supported this research project from the Institute for Public Administration (IPA). IPA's research team conducted a literature review and field assessment of curbside operations, which involved photographing curbside conditions, surveying passengers, and riding various intercity buses between New York City and Washington, D.C. in 2011 and 2012. IPA also conducted a case study on a Chinatown bus that was based in Wilmington, Del., which was cited as an "imminent hazard" and shut down by the United States Department of Transportation (USDOT) during the course of this research.

Finally, IPA hosted the June 13, 2012 Curbside Intercity Bus Transportation Policy Forum to facilitate discussion on transportation policies related to the industry. The forum featured Frank Ross of FMCSA, who described federal strategies to ensure safe operations of intercity curbside buses. President and CEO of the American Bus Association (ABA) Peter Pantuso provided industry perspectives on the curbside intercity bus industry and explained ABA's support for more effective bus-safety regulation and enforcement. A forum panel discussion featured transportation officials from Philadelphia, New York City, and Washington, D.C. as well as the Union Station (D.C.) Redevelopment Corporation, and Port Authority of New York and New Jersey. Participants engaged in a roundtable discussion on issues impacting the industry, including a crackdown against unsafe operators, need for uniformity in federal rulemaking, competition among bus carriers and rail, and strategies to manage and regulate curbside operations.

Federal-, state-, and local-government rulemaking, legislation, policymaking, adoption of regulatory guidelines, and management approaches seek to address issues stemming from the lack of industry regulation and unscrupulous operators. Despite the new regulatory emphasis, transportation policy challenges and opportunities abound. Additional investigation, policy analysis, public engagement and outreach, and policy forums are needed to understand evolving issues and develop a comprehensive research agenda. Policymakers, transportation officials, government leaders, safety oversight investigators and professionals, industry advocates, insurers, the private sector (e.g., developers of transit-oriented development), and other stakeholders need to convene regularly to discuss key issues to keep this transportation mode safe, affordable, resilient, and competitive.

IPA hopes that this comprehensive report not only provides a snapshot of the state of the industry, but also will serve as a foundation for future research. Future topics of research may include the need to further enhance intergovernmental coordination on industry transportation policy issues, formulate strategies to regulate and manage curbside operations within major cities, study financial and economic development impacts of the industry on state and local governments, facilitate additional discourse among industry stakeholders, improve intermodal linkages to ensure smooth and efficient transfers among modes at transportation hubs, and plan for an integrated network of individual transportation facilities, services, modes, and linkages.

2. Introduction

2.1 Problem Statement

Managing surface transportation within the Northeast Corridor has proved a vexing problem for planners and policymakers. Congestion along road, rail, and air corridors is an inconvenience for travelers and constrains economic development. The traditional tools for transportation planners such as passenger rail upgrades, construction of additional or widened highway-lane miles, and airport expansion are capital intensive and take years to implement. In this context, another form of mass transit has arisen: private, for-profit curbside intercity bus service.

Curbside intercity buses may serve as a partial answer to the challenges of interurban mobility in the Northeast Corridor and throughout the United States. Unlike conventional motorcoach carriers like Peter Pan, Trailways, and Greyhound, newer curbside intercity bus operators typically sell tickets primarily online, offer onboard amenities such as Wi-Fi, and offer point-to-point express service between major cities, but do not utilize a bus terminal. In addition to Chinatown buses, discount city-to-city corporate operators (e.g., BoltBus, DC2NY Bus, and Megabus) and new subsidiaries of niche-oriented conventional carriers, now offer speedy and cost-competitive interurban bus service, making the flashy double-decker buses a common sight on highways between major urban destinations. A newer business strategy of these curbside operators is to expand service from urban point-to-point destinations to regional, short-distance routes, college campuses, and suburban destinations.

Until 1982, the intercity bus industry operated under federal government regulation. The passage of the 1982 Bus Regulatory Reform Act (BRRA) ended federal government economic control over interstate bus services and preempted state regulation of intercity bus fares, schedules, and routes. Initially, deregulation of the intercity bus industry resulted in financial problems, a discontinuation of service to over 2,000 points, and an overall decline in passenger revenue (Fravel 1985). However, after two decades of deregulation, the curbside intercity bus industry is thriving. Ridership is growing due to competitive pressure for new services that appeal to cost-conscious, tech-savvy, young riders seeking economic fares to travel destinations. A recent study by the Chaddick Institute for Metropolitan Development at DePaul University documents a continued rise in the intercity bus industry since 2006-07. The industry experienced its largest annual growth in 2008 (9.8%) and second-highest growth in 2012—7.5 percent (Schwieterman et. al. 2013 2).

However, despite the rapid growth in this mode of transportation, the curbside intercity bus industry also raises a number of policy questions. Intercity bus operations exist largely outside of the traditional coordinated transportation network, with buses frequently loading and unloading on busy street corners at major intersections. Passengers waiting to board rarely have access to informative signage or shelter from the elements. Rogue bus companies, which fly under the radar from regulatory agencies, have put passengers at risk through unethical and unsafe business practices. Since March 2011, crashes involving curbside intercity buses along the I-95 corridor have killed 22 people and injured another 169 (USDOT 2012, 3). In addition to safety, other noted issues of concern include compliance with the Americans with Disabilities Act of 1990 (ADA), management of curbside conditions, regulatory enforcement difficulties, and evasive business practices of chameleon carriers.

Yet, the potential role for intercity bus services in providing expanded intermodal services and linkages among other transportation modes within the Northeast Corridor needs further exploration. The demand for inexpensive, amenity-rich (e.g., onboard Wi-Fi, electrical outlets, online ticketing, and bus-tracking applications) intercity transportation has implications for demand-response forms of transportation, sustainability of federally-supported transportation systems, and competition among other intercity modes within the Northeast Corridor.

2.2 Purpose of Study

Research on this topic was made possible through support from the University of Delaware University Transportation Center (UD-UTC)—that, as a Tier II center, focused on resiliency of transportation corridors. Because intercity bus travel is important to the resiliency of the Northeast Corridor and the overall transportation network, it merits further attention and discourse among transportation planners, policy makers, and industry stakeholders.

The objective of this project is to research transportation policy opportunities and challenges for the curbside intercity bus industry within the Northeast Corridor—from Washington, D.C. to New York City. To accomplish this objective, research tasks included conducting a literature review and data collection on the intercity bus industry, a field assessment of curbside operations in major metropolitan areas between Washington, D.C. and New York City, and a workshop of stakeholders. Specifically, the research team focused on:

- Tracing the evolution of the curbside intercity industry following its deregulation and decline;
- Documenting factors giving rise to industry growth;

- Identifying transportation policy issues related to industry growth;
- Observing, experiencing as passengers, and documenting curbside conditions;
- Conducting a case study of the Wilmington, Delaware-based Chinatown bus company, Double Happyness Travel, Inc.;
- Citing federal, state, and local government responses to industry-related issues;
- Understanding perspectives of industry advocates; and
- Planning, hosting, and facilitating discussion among stakeholders at the Curbside Intercity Bus Transportation Policy Forum at the University of Delaware on June 13, 2012.

3. History, Deregulation, and Decline of Intercity Bus Industry

3.1 Early Bus Travel

With the growth of the automobile industry in the early twentieth century in the United States, travel between cities became more accessible for an increasing number of Americans. Automobiles offered greater autonomy in passenger travel, and enterprising individuals began to carpool and offer longer routes to riders in their personal vehicles (Schisgall 9). Capitalizing on the success of these early entrepreneurs, car manufacturers began to offer vehicles with greater passenger capacity (Schisgall 9). The newly formed bus companies generally attempted to improve the quality of service, sometimes even offering sleeper berths in these new vehicles. For those Americans who did not yet own a personal automobile or did not wish to drive, bus travel became a viable alternative. Buses offered greater flexibility than rail travel, and were more utilized in short-haul routes including routes to rural areas (Walsh *Making Connections 18-21*).

The bus industry grew in a largely unorganized manner, where would-be operators found few barriers to entry in the market and were able to create bus routes to address demand. Early routes often picked up on street corners, near businesses, and elsewhere (Walsh *Making Connections* 19). Early success encouraged establishment of route standardization to increase profit margins.

In Minnesota, car-dealership owner Carl Wickman began to transport miners to nearby towns for a small fee, found robust demand, and rapidly expanded his car travel business. By 1918, ridership had increased substantially, and Wickman's Mesaba Transportation Company had 18 cars carrying passengers in Minnesota. This company would later become the Greyhound Corporation and would come to dominate the intercity bus industry for much of the twentieth century and beyond (Schisgall 7-9).

Elsewhere in the country, entrepreneurs established competing passenger car services that offered rides over short routes. Poor road conditions and few linkages between rival car services limited intercity bus routes (Walsh *Making Connections* 19). As demand grew, bus companies began to acquire more buses and recognized the need for terminals and maintenance facilities. Many small companies merged during the 1920s in order to provide these services (Rose 45). Railroad companies, feeling threatened by the bus industry's expansion, also began to run bus lines in addition to their rail services in order to capture some of the bus industry's success (Walsh *Making*

Connections 21). Notably, these rail companies often were able to link rail and bus routes for increased multi-modal transportation (Walsh *Making Connections* 21).

The bus companies became more organized; they standardized routes, rates, accounting practices, and services in order to increase profits as they experienced increased competition. In 1925, a total of 14,090 buses were in service and traveled a total of 218,601 miles (Walsh *Making Connections* 7-8). As companies and routes expanded, many states began to impose regulations on bus carriers to control prices, licensing, insurance, maintenance, and scheduling (Walsh *Making Connections* 10). By 1929, all states except Delaware had imposed regulations on bus companies (Rose 46).

The Great Depression, beginning in 1929, left many bus companies with fewer customers and capital. The number of bus companies dropped from 3,910 in 1929 to 2,760 in 1932 (Walsh *Making Connections* 23). Greyhound, too, was forced to restructure. Eventually, Greyhound regained footing helped in part by a 1934 movie titled *It Happened One Night*, which favorably depicted a Greyhound bus. The company was also awarded a substantial busing contract for the 1939 New York World's Fair (Schisgall 35-41, Walsh *Making Connections* 24). By 1933, Greyhound operated a long list of affiliates and subsidiaries across the nation (Schisgall 42). Bus companies also thrived because of extensive marketing campaigns that advertised bus trips for leisure travel to national parks and other holiday destinations. Large companies like Trailways and Greyhound offered competing networks; and as a result, bus passenger miles increased in the late 1930s despite the country's damaged economy (Walsh *Making Connections* 158-163).

Motor Carrier Act of 1935

After a decade-long fight between railroad and motor carrier factions to address concerns with regulation and competition, U.S. Congress passed the Motor Carrier Act of 1935. Thus far, transportation was subject to state laws even if it involved interstate commerce (Nelson 464). The U.S. Supreme Court considered this issue in 1925, and in two separate cases, determined states did not have jurisdiction over interstate commerce. However, Congress failed to pass any transportation bill concerning federal regulation until 1935 (Nelson 464, Walsh *Making Connections* 24).

The Motor Carrier Act, through the Interstate Commerce Commission (ICC), acted to promote coordinated travel, establish reasonable rates, ensure safety, and prevent inefficiency in transportation within the United States (Nelson 472-474). Additionally, the law sought to manage competition by dictating that carriers set and publish reasonable rates, which could not be altered within thirty days of taking effect (Nelson 485-6). In addition to rate control, the law imposed controls over accounting practices,

mergers and acquisitions, and recordkeeping, and tasked ICC with studying and determining safety regulations (Nelson 491-3).

The legislation of 1935 favored more established carriers that were able to adjust to the new regulations. No other company could keep pace with Greyhound by the 1930s, and restrictions on price competition led to an increase in services offered by Greyhound and other large carriers (Walsh *Making Connections* 25- 26).

When the United States entered World War II, as newly drafted troops rode Greyhound to new assignments and to and from military bases, Greyhound and other bus companies experienced an increase in ridership. However, at a rate of less than one-and-one-half cent per mile, this government-subsidized travel hardly contributed to increased profits (Schisgall 76). Additionally, more civilians began to take more trips for pleasure as the war increased the number of jobs available to those not fighting abroad (Schisgall 73).

3.2 Intercity Bus Industry after World War II

Following the end of the war, the intercity bus industry faced many obstacles to growth. During the war, resources and production had been devoted to the war effort and were redirected from commercial purposes. These restrictions curtailed the production of new vehicles and the construction of new buildings. This hindered the industry's ability to make capital investments, including acquiring new buses and making improvements to bus terminals. The lifting of wartime restrictions—and the resulting spending spree by consumers—led to large increases in the price of goods, construction, and real estate, further impeding the intercity bus industry's ability to invest and expand (Walsh "Bus Industry").

The industry also faced political obstacles to investment, expansion, and modernization of the intercity bus system. In July 1946, ICC began an investigation of the industry to address concerns about profit margins during the war and the lack of uniform bus fares. This investigation, which lasted until December 1949, left many intercity bus industry operators hesitant to invest until results of the investigation were made public. ICC concluded in its investigation that the industry had operated appropriately and that differences in bus fares were caused primarily by local and regional factors. State governments also added to the industry's hesitancy to invest by enacting various new taxes and fees that increased operating costs for the bus operators (Walsh "Bus Industry").

A surge in demand for private automobiles also provided intense competition for the industry. In the decade following World War II, the number of registered automobiles

rose from 25.7 million vehicles in 1945 to 52.2 million vehicles in 1955 (*Highway Statistics: 1945*; *Highway Statistics: 1955*). Government investment strategies, landuse development trends, and American consumerism all promoted an increase in travel by car, at the expense of other modes of travel. The passage of the Federal-Aid Highway Act of 1956 gave birth to and financed America's Interstate Highway system, which promoted ease of long-distance highway travel in automobiles (Weingroff). Sprawling land-use patterns, which spurred suburban development and suburbanization, required travel by car and fostered greater dependence on automobiles. The post-World War II boom in car ownership, and desire to "see the USA in your Chevrolet," helped cast the car as symbol of the American dream of greater prosperity. These new patterns of transportation favored car ownership and an automobile-oriented culture.

In the late 1950s, the domestic aviation industry grew with a new generation of commercial jets that offered more convenient travel, greater passenger capacity, and competitive airfares. Air travel began a steady increase in the proportion of intercity travel—increasing its share of intercity travel from 7.8 billion passenger miles in 1949 to 30.5 billion passenger miles in 1959 and 111.5 billion passenger miles by 1969 (Siddiqi).

While automotive and airline travel showed strong growth following World War II, intercity bus transportation experienced very little growth. For example, in 1949, intercity bus travel amounted to 24.0 billion passenger miles. By 1969, this had risen to 24.9 billion passenger miles. Measured as a percentage of total intercity passenger miles, bus transportation experienced steady decreases, dropping from five percent in 1949 to 2.2 percent of total passenger miles by 1969 (Walsh "Bus Industry").

Deregulation: Bus Regulatory Reform Act of 1982

During the presidency of Dwight Eisenhower, significant discussion began regarding the need to deregulate the transportation industry (Rose, Seely and Barrett 185). The rail, trucking, air, and bus industries were all regulated under various acts that were designed to ensure fair, reliable, and safe transportation for passengers and freight. These acts produced several negative externalities, including large barriers to entering and exiting each mode within the transportation industry (Moore). By the 1970s, many members of the transportation industry had recognized that the factors that encouraged regulation of the industry no longer existed, including ensuring continuity of service and the need to control pricing ("The Changing Face of Transportation"). Presidents Johnson, Nixon, and Ford had each taken actions to achieve limited deregulation of the industry, including the creation of the U.S. Department of Transportation (USDOT). By forming the USDOT and consolidating transportation governing bodies under this agency, more presidential control was gained to more

directly and effectively steer transportation policy, especially in the area of industry regulation. Under President Nixon, the executive branch secured the authority to appoint several key positions, including ICC's chair. Stocking these positions with proponents of deregulation, officials helped to further the deregulation agenda (Rose, Seely and Barrett 185).

Under the Carter and Reagan administrations, several legislative acts were passed to deregulate the transportation industry, including the Motor Carrier Act of 1980, the Revitalization and Regulatory Reform Act of 1976, the Staggers Rail Act of 1980, the Airline Deregulation Act of 1978, and the 1984 Shipping Act. Each of these bills was designed to remove government restrictions on the industry and to create more competitive, market-driven industries ("The Changing Face of Transportation"). The intercity bus industry was also deregulated at this time through the Bus Regulatory Reform Act of 1982 (BRRA).

BRRA was designed to address a number of issues in the intercity bus industry including barriers to entry and exit, and inflexibility in setting fares and determining intermediate stops on existing routes. BRRA was designed to address these issues by enacting several reforms at ICC that forced the commission to allow new companies to enter the industry, as long as entry was in the public interest and they were "willing and able" to provide service. To address the barriers to exiting the industry, BRRA gave ICC the final authority on allowing firms to discontinue unprofitable routes or to discontinue service altogether (Fravel 38). The lack of flexibility within the industry was resolved by allowing the bus companies to set fares and determine stops along bus routes (Walsh "Bus Industry").

Because of the various deregulation measures passed by Congress in the 1970s and 1980s, ICC's authority became greatly diminished. In 1995, Congress enacted the Interstate Commerce Commission Termination Act, which abolished ICC and created its successor agency—the Surface Transportation Board (STB). STB is charged with the economic regulation of the rail industry; promoting regulatory reform; resolving surface-transportation disputes; and overseeing certain intercity passenger bus company structure, financial, and operational matters ("About STB"). Other ICC regulatory functions were either eliminated or transferred to the Federal Motor Carrier Safety Administration (FMCSA).

Intercity Bus Industry Following Deregulation

Implementation of BRRA has had far reaching implications for the industry. BRRA, in conjunction with other deregulatory transportation acts, created a highly competitive market within the bus industry and throughout the intercity transportation industry as

a whole. Within the bus industry, deregulation allowed bus companies to engage in price competitions in a bid to control profitable routes, much to their own detriment (Walsh "Bus Industry"). The intercity bus industry was also forced to compete with the newly deregulated airline industry for their share of the intercity travel industry.

Both the competition among bus companies and with other sectors of the transportation industry (particularly automotive and air travel) forced the bus industry to focus their resources on their most profitable service routes and to drop unprofitable routes, which led to a significant decline in the number of locations that the intercity bus industry served. In the early 1970s, the bus industry served nearly 16,000 locations nationwide and by 1982, this number had dropped to 11,000 ("The Changing Face of Transportation").

Traditional motorcoach companies like Peter Pan, Trailways, and Greyhound dominated the intercity bus market following industry deregulation. Traditional intercity bus operators generally operate as part of a hub-and-spoke system. This system can be described as a series of scheduled routes, often with multiple stops along the way that originate from a central urban hub. Most bus carriers use bus terminals as the hub of operations, and service rural areas. Bus terminals are generally located in central business districts and provide basic sheltered waiting areas and facilities for passengers purchasing tickets, waiting to board buses, or transferring to another bus route.

By the year 2000, the number of bus locations served nationwide had fallen to 5,000 ("The Changing Face of Transportation"). The discontinued service routes predominantly affected rural, low-population-density areas. In 1984, the Motor Carrier Ratemaking Study Commission released a report that noted that 2,154 points of service had been discontinued by the bus industry since the passage of BRRA two years earlier (Fravel 48). This same report indicated that the average population of the points of service discontinued between 1982 and 1984 was fewer than 2,000 (Fravel 48).

STB Motor Carrier Pooling Agreement

In 1997, Peter Pan Bus Lines, Inc. and Greyhound Lines, Inc. filed applications with STB to pool their operations in the Northeast between New York City (NYC) and Philadelphia, NYC and Washington, D.C., NYC and Boston, and NYC and Springfield, Mass. STB approved the applications based on evidence that a pooling agreement between the two companies would bolster ridership, reduce excess bus capacity, minimize a duplication of resources, and enhance capital service improvements (STB Decision, 2012).

In 1999, STB issued a decision to formalize the process to authorize motor carrier pooling agreements. While the federal government sought to curtail its economic regulation of motor carriers, it was decided that STB would continue to review arrangements under which motor carriers "pool" or share their services, traffic, or revenues if deemed to "enhance service to the public and economy of operation" (STB News Release, No 99-24).

STB's decision in 1999 lead to the enactment of U.S. Code, Title 49: Transportation §14302—Pooling and Division of Transportation or Earnings. Under this law, STB is charged with approving a pooling arrangement if it finds that the proposed pool is not of major transportation importance, or if it finds that the proposed pool "will be in the interest of better service to the public or of economy in operation and will not unduly restrain competition" (49 USC 14302). In addition the new law granted STB authority to require bus carriers to consolidate routes with other carriers. As a result of this law, there was a rise in the number of carrier consolidations within the bus industry.

4. The New Curbside Intercity Bus Industry

Beginning in the 1990s, the intercity bus industry saw an increase in ridership stemming from an emerging, curbside intercity bus industry (Klein 2011 3). While there is not one universal definition of curbside intercity bus carriers, the Chaddick Institute for Metropolitan Development at DePaul University describes curbside bus operators as those that "generally arrive and depart from designated curb locations along city streets, typically near the center of town" (Schwieterman and Fischer 2011 1). Except in areas where mandated or incentivized to operate out of multi-modal transportation hubs, curbside operators typically sell tickets primarily online, offer onboard amenities such as Wi-Fi, and offer point-to-point, express service between major cities primarily in the Northeast, Mid-Atlantic, Midwest (although new expansions are targeting college towns and suburban destinations). They do not utilize a bus terminal. The industry can be divided into two main categories—Chinatown bus operators and corporate carriers (e.g., BoltBus, DC2NY, and Megabus). Increasingly, new subsidiaries of niche-oriented conventional carriers (e.g., Greyhound) are joining the ranks of corporate, curbside intercity bus carriers.

4.1 Chinatown Bus Operators

"Chinatown bus" is the de facto term for bus companies, owned primarily by Asian Americans, that transport passengers between Chinatown districts of major cities. The Chinatown bus industry began by seeking to capitalize on a perceived demand of a specific immigrant group (Klein 2011 5). The Fung Wah Transportation Company was the first company to begin offering regular van rides to Chinese immigrants to Boston (as a way for parents to visit their children attending Boston's many colleges); the company rapidly expanded as demand increased (Klein 2009 85, Klein 2011 3). The success of these routes prompted a handful of other companies to offer point-to-point, express routes primarily between New York City's Chinatown and Chinatown sections of other Northeast cities (Klein 2011 3). New Century Travel began to offer rides between Philadelphia and New York (Klein 2009 85). Initially, mostly Chinese passengers traveled on Chinatown lines, but low fares began to attract young adults, college students, and other cost-conscious riders (Klein 2011 3). A survey conducted in 2003 by one such bus operator, Dragon Coach, found that one-third of its weekday passengers were not Asian. Half of those who traveled during weekends were also non-Asian (Klein 2009 85).

Chinatown companies usually offered one route several times a day with minimal amenities, using older bus fleets. For example, Fung Wah operated 24 daily trips on its only route between New York and Boston (Ben Austen 1). Tickets could be purchased

street side or at a storefront. In 2002, many bus companies began selling tickets online through GotoBus.com, a privately held company formerly known as IvyMedia Corporation (Jimmy Chen). This online ticket-broker service made the Chinatown buses more accessible to mainstream passengers. This issue will be discussed in more detail in the case study in Section 7.

The term "Chinatown buses" now refers to a number of smaller, non-corporate companies that continue to operate intercity buses and often use Chinatown districts in major U.S. cities as travel hubs (Klein 2011 3). Most Chinatown bus companies are private companies, are owned by Asian Americans, and are small in scope. Chinatown companies often rely on employees to both collect tickets and drive if necessary. The business model depends on buses being full, which means the buses might idle until enough passengers are onboard (NYC Department of City Planning, 2009). Two major factors in the success of Chinatown buses were the frequency of service and walk-up, flat fares offered to anyone that ventured into Chinatown without any need for advance purchase or planning. The success of these companies has encouraged other corporate operators to enter the business, and the deregulated atmosphere has allowed easy entry to curbside service. Increased competition among these Chinatown buses resulted in significant fare reductions in the early 2000s (Klein 2009 85). With the arrival of corporate carriers into the curbside intercity bus market, the industry continues to offer competitive fares.

4.2 Corporate Carriers

Unlike traditional intercity bus companies, curbside intercity bus operators began by capitalizing on the success of Chinatown bus operators. New curbside intercity bus operators began to use curbside locations rather than bus terminals to reduce overhead costs, compete with Chinatown bus operators, and fulfill a niche in the market for a demand for low-cost, point-to-point transit services (Schwieterman and Fischer, 2011).

Stagecoach Group, a British company, began operating as Megabus intercity bus lines in the Midwest in 2006, and then expanded to the Northeast in 2008 (Megabus website, Klein 2009 85). Megabus selected Chicago as its first U.S. hub and began running lines from Chicago to Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Milwaukee, Minneapolis, and St. Louis, as well as routes between Indianapolis and Cincinnati, and Indianapolis and Columbus (Coach USA, 2006). The company advertised express routes between major cities with fares as low as one dollar. Since its founding, Megabus has served over 18 million passengers. In 2010, Megabus operated 135 buses each day (Austen 1) and added 20 new routes. It carries approximately four million passengers each year, up from two million just two years after it began

operations in 2006 (Austen 1). As of early 2013, Megabus serves more than 130 cities and operates from six hubs in the United States—Washington, D.C., Pittsburgh, Philadelphia, Atlanta, New York City, and Chicago—and one hub in Toronto, Canada (Megabus). Megabus has also expanded to offer service in college towns and the Southeast United States, as well as reentering the California and Nevada market (Megabus).

Another corporate carrier, BoltBus, began as a partnership between Peter Pan Bus Lines and Greyhound in 2008 (Klein 2009 85). Peter Pan is a traditional intercity bus carrier in the Northeast, and Greyhound is the largest intercity bus company in the United States. BoltBus reports that after only three months of service, the curbside business was profitable (Austen 1). In 2012, BoltBus expanded to serve three cities in the Northwest: Vancouver, British Columbia; Seattle, Wash.; and Portland, Ore.

Both Megabus and BoltBus offer routes between major cities, and are subsidiaries of large international, publicly traded companies. These bus companies are doing well in the medium-haul business, which is defined as city-to-city trips under 300 miles between large cities, rather than in rural areas (Austen 2).

A number of route-specific carriers have also emerged such as DC2NY. As its name implies, this carrier runs routes between Washington, D.C. and New York City and to vacation destinations (e.g., Rehoboth Beach and Dewey Beach, Del.) from Washington, D.C. during summer months. Other notable companies that operate within the Northeast I-95 corridor, where the highest level of intercity bus services exists, include Vamoose and Washington Deluxe. Vamoose provides routes from Virginia and Maryland suburbs of Washington, D.C., to New York. Other emerging corporate carriers service the national capital area from curbside locations (DuPont Circle) and intermodal facilities (Union Station) to New York City (Vamoose, Washington Deluxe, DC2NY).

In addition, there is a significant growth in curbside departures and point-to-point services in response to a demand for more upscale, niche services. To cater to this market, new operators like C & J and Dartmouth, which have high-end, two-in-one service (i.e., larger seats, meeting areas, and even onboard food service), are expanding services to meet the growing demand in New England. In New England this second tier of higher-level services, with buses that provide bigger seats and offer galley service, is competing successfully with Amtrak and regional rail service.

A number of regional bus companies have also entered the Southern market, including Red Coach in Florida. A more chic, curbside intercity bus experience is now offered to patrons traveling to Fort Pierce, Fort Lauderdale, Gainesville, Miami, Naples, Ocala, Orlando, Tallahassee, Tampa, and West Palm Beach (Destinations, Red Coach).

Conventional buses responding to curbside carriers' success have contributed to a traditional bus company industry growth of 1.4 percent (Schwieterman 2013 1).

In 2012, Greyhound began an express service called Yo! Bus, which operates between Philadelphia and New York. The marketing strategy seems to be designed to appeal to both existing Chinatown bus customers and a more sophisticated clientele. The name is derived from the Chinese word meaning "protect," and the slang, Rocky-esque Philadelphia greeting, "Yo!" (Yo! Bus website).

One notable characteristic of Megabus is that customers need a credit card to book a ticket, even if you book in person, or over the phone—both of which account for fewer than five percent of bookings overall (Colm Lynch, personal communication, March 27, 2013). This effectively acts as a filter for those without bank accounts—a major difference from Greyhound and a way for Megabus to maintain a reputation that does not resemble that of Greyhound (B. Chamberlain, personal communication, March 27, 2013). Most other carriers such as DC2NY, Red Coach, BoltBus and Vamoose do allow walk-up fares to be paid in cash, though schedules are primarily listed online. Greyhound offers a variety of ways to pay, including online purchases that can be paid in cash at a station (Greyhound-Home). Onboard surveys of Greyhound and BoltBus, listed separately because of different demographics and increased transit options, reveal that fifty-seven percent of Greyhound riders outside the Northeast use cash to purchase tickets compared to only three percent of BoltBus passengers (David Hall). This emphasis on cash purchases stems from the fact that only 65 percent of Greyhound riders in the Northeast and 46 percent outside the Northeast have credit cards compared to 88 percent of BoltBus riders (David Hall). No credit card means no online purchases. This accounts for one major difference between these types of bus companies and will be discussed at length on pages 21 – 22 in Section 4.4 of this report. The rapid growth of this industry merits further documentation to examine its success in an industry that had been declining for decades.

In addition, large corporate carriers are expanding services from major metropolitan areas to college campuses and surburbs. For example, in fall 2012, both Megabus and Greyhound's express bus service began offering service from the University of Delaware's Newark, Del. campus to New York City (Greyhound.com).

4.3 Growth

Stagecoach Group began operating as Coach USA in 2006, rolled out Megabus intercity bus lines in the Midwest using Chicago as its first hub, then expanded to the Northeast in 2008 (Megabus) (Klein, 2009). It began running lines from Chicago to Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Milwaukee, Minneapolis, and

St. Louis, as well as routes between Indianapolis and Cincinnati, and Indianapolis and Columbus (Express, non-stop bus service begins in Chicago, 2006). The company advertised express routes between major cities with fares as low as one dollar. In 2010, Megabus operated 135 buses each day (Austen) and added 20 new routes. Since its founding, Megabus has served 25 million passengers (B. Chamberlain, personal communication, March 27, 2013). As of early 2013, Megabus serves over 130 cities and operates from six hubs in the United States and continues to expand (Megabus). Megabus has also expanded service to college towns, and the southeast United States, as well as reentering the California and Nevada market (Megabus).

The other major carrier BoltBus operates separately from the Greyhound brand (Klein, 2009). In 2012, BoltBus expanded to the Pacific Northwest running routes between Seattle, Portland, and Vancouver. BoltBus reported that after only three months of service, the curbside business was profitable (Austen).

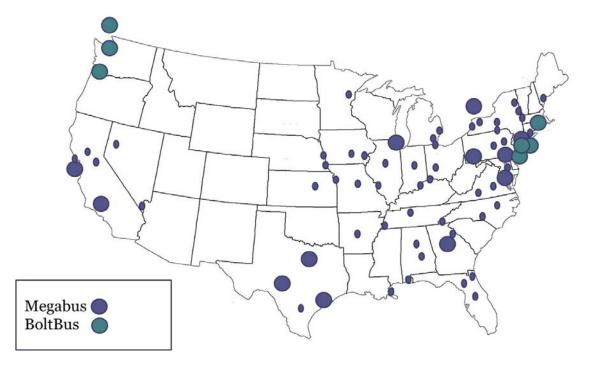


Figure 1: Growth of Two Major Intercity Bus Carriers with Approximate Locations, 2013 (Collins, E). Large Circles represent hubs; smaller ovals represent other cities served and are not comprehensive.

The corporate carriers lead the growth of this industry with greater geographic expansion and ridership numbers than their counterparts, as shown in Figure 1. Unfortunately, data regarding comprehensive ridership and profitability for private curbside, intercity bus companies are not readily available. Small studies and industry reports can help fill in some of the gaps. The analysis provided comes from available

data drawn from news reports, company reports, trade associations and other stakeholders to depict a more accurate picture of the industry.

Chaddick Institute counted over 1,000 daily bus departures in 2012 (Schwieterman et al., 2013). Chaddick Institute's latest report estimates that the two major carriers represent 86 percent of the new industry and 23 percent of intercity motorcoach companies overall (Schwieterman et al., 2013). Reports of ridership and routes do not include Chinatown companies because little public information is available and most of these companies are small and offer one or two routes each.

Other companies such as DC2NY and Vamoose have not expanded outside the Washington, D.C.-to-New-York corridor thus far. Red Coach has not expanded outside Florida (Destinations—Stations and Stops, 2012). Much of the substantial growth in this industry in 2012 stems from geographic expansion and additional routes from existing hubs. Both BoltBus and Megabus have acquired or partnered with traditional bus companies to expand services (Schwieterman et al., 2013). In 2012, Megabus used acquisitions to begin shorter distance routes focusing on service to college towns, and smaller cities, as well as areas without significant public transportation alternatives, such as Texas and the Southeast (Schwieterman et al., 2013). BoltBus has also moved into typical commuter routes on Long Island with stops from Manhattan out to Ronkonkoma and Riverhead (both stops on the Long Island Railroad), as an operation with Hampton Luxury Liner. The stops are located in park and rides as well as public space in hotel lobbies (BoltBus). This represents a departure from their usual business; however, these services are still new and little data are available to analyze.

Table 1: Megabus Company Statistics, (USDOT FMCSA, 2013)

Division	Power units or buses	Drivers	Miles per year
Megabus Northeast, LLC	116	282	18,382,062 (2012)
Megabus USA LLC	50	150	9,291,829 (2012)
Kerrville Bus Company, Inc.	114	220	1,307,400 (2012)

Megabus now serves more than 130 cities in the United States and Canada as of early 2013 (B. Chamberlain, personal communication, March 27, 2013). In 2008, they began offering double-decker buses that hold up to 81 passengers (Schwieterman & Fischer, 2010). In 2009, Megabus acquired a Chinatown bus company called Eastern Travel in an attempt to make them "respectable," but quickly sold the company after realizing the extent to which operational procedures on safety, maintenance, and driver education would have to be raised to meet Megabus standards (B. Chamberlain,

personal communication, March 27, 2013). The company bought and sold Eastern Travel within the year. Discussion with Megabus officials revealed that Eastern Travel's maintenance-policy handbook only mentioned the need to change oil every 5000 miles with no other details listed regarding bus maintenance (B. Chamberlain, personal communication, March 27, 2013). Safety is a high priority for a high profile company with stockholders.

Economic Impact

Specific profit and financial information of private bus companies is generally hard to procure. However, a Drexel University LeBow College of Business *2012 BoltBus Economic Impact Analysis* (EIA) study provided compelling data on the economic benefits of curbside intercity bus operations. BoltBus commissioned Drexel to conduct the EIA after receiving complaints "that the company uses public curb space for profit, without contributing to the city of Philadelphia economically. The City of Philadelphia asked BoltBus for justification of what impact the service has on the community in an effort to justify intercity curbside travel" (Antolin et al., 2012, 5).

BoltBus shares 120 feet of space with Megabus on the 3100 block of John F. Kennedy Boulevard in Philadelphia located behind the 30th Street Station, home to Southeastern Pennsylvania Transportation Authority (SEPTA) and Amtrak services (Antolin et al., 2012) (Drexel LeBow, 2012). The report focuses on the primary route between Philadelphia and New York City. Drexel reports that this route is the second most utilized, in terms of ridership, of any North American Greyhound route; it is estimated to have served 700,000 passengers in 2011 (Antolin et al., 2012) (Drexel LeBow, 2012). Buses running between Philadelphia and New York City operate at 85- to 90-percent capacity with an average \$12 fare, which translates to a profit margin of 20 percent—approximately twice that of Greyhound's profit margin for the same route (Drexel LeBow, 2012) (Antolin et al., 2012).

This analysis also demonstrated that ridership is subject to changes and adjustments once a new service is introduced. Weekend ridership is higher for this route and demonstrates that most are traveling for pleasure. After this ridership trend was recognized, BoltBus increased weekend service and reduced less profitable mid-week travel (Antolin et al., 2012). A 2011 study by the Chaddick Institute also affirms that riders are primarily traveling for pleasure and on weekends (Schwieterman & Fischer). In addition, data indicate that those riding these new buses are indeed a different segment of the country than traditional riders of Greyhound.

The Drexel LeBow College of Business analysis explored the impact of BoltBus operations on Philadelphia's economy, mode shift, taxes, environmental impact, and

quality of service. The study concluded, "BoltBus service has a significant positive impact on the city of Philadelphia, and a small negative impact on primarily the operators of the other alternative modes of transportation" (Drexel LeBow, 2012, 69). While BoltBus operations did not provide significant economic impact when compared to Amtrak and air travel, the mode did generate local employment through incremental revenue derived from customer and organizational spending. The study also noted other positive impacts of BoltBus operations to Philadelphia, such as providing a low-cost transportation alternative to intercity modes, easing traffic congestion, and moderating greenhouse gas emissions (Drexel LeBow, 2012). Taking into account both total positive and total negative impacts, the total estimated impact of BoltBus service in 2011 to the city of Philadelphia was estimated to be \$575K with 865 jobs generated (Drexel LeBow, 2012).

Demographics of Curbside Intercity Bus Riders

A significant characteristic of the new industry is the demographics of the ridership, because it differs greatly from that of conventional bus carriers. These characteristics have implications in understanding and planning the future of the industry. Drexel found that 76 percent of curbside intercity bus riders were traveling solo (Drexel LeBow, 2012). In addition, more of these riders are single women who used to be the mainstay of Greyhound travel (Schwieterman, 2007) (Drexel LeBow, 2012). In fact, Greyhound reports that 65 percent of riders surveyed are young women, which is more than Greyhound in the Northeast or outside the Northeast (David Hall).

Table 2: Survey Data on Demographics of Bus Riders (Klein, 2012)

Type	Number Surveyed	Average Household Income	Demographics
Corporate (curbside intercity) Carriers	325	\$63,944	Black 12%, Asian/Pacific Islander, 14%, Hispanic/Latino 8%, White/Caucasian 60%, Other 7%
Chinatown Carriers	231	\$50,105	Black, 25%, Asian/Pacific Islander 26%, Hispanic/Latino 8%, White/Caucasian 37%, Other 5%
Traditional Carriers	214	\$54,333	Black 31%, Asian/Pacific Islander 8%, Hispanic/Latino 11%, White/Caucasian 43%, Other 7%

As shown in Table 2, passengers taking corporate carriers are more affluent than both typical traditional (e.g., Greyhound) and Chinatown bus riders. One reason is that

most tickets are purchased online in advance with the use of a credit card. This financial transaction thus excludes those with limited access to the Internet and/or meet financial qualifications for credit card approval.

Industry data affirm that curbside bus riders are also well educated. College students or graduates comprise 82 percent of passengers riding BoltBus (Austen). In contrast, only 20 percent of Greyhound riders outside the Northeast and 41 percent of riders in the Northeast have a college degree or advanced degree (David Hall).

Survey data on ridership also show that White/Caucasians dominate the passenger profile for curbside intercity buses (60%). This is compared to a diverse passenger mix riding Chinatown buses that includes Blacks (25%), Asian/Pacific Islanders (26%), and Whites/Caucasians (37%). In contrast, Blacks (31%) and White/Caucasians (43%) represent the largest percentage of passengers on traditional carriers (Klein, 2012).

4.4 Factors Contributing to Industry Growth

There are several factors that may have contributed to the growth of the curbside intercity bus industry, which are detailed in the following section. These include the industry's appeal to Millennials, online ticketing, on-board technology, and low-cost hassle-free travel.

Appeal to the Millennial Generation

A 2012 report, *Transportation and the New Generation*, reveals new travel trends for Americans and changing travel preferences for the Millennial generation (i.e., children of baby boomers). For the first time since World War II, Americans are driving less. Young Americans, in particular, are relying less on cars and turning to alternate forms of transportation. The report reveals that between 2001 and 2009, the annual number of miles traveled by 16- to 34-year olds on public transit, such as trains and buses, increased by 40 percent (Benjamin Davis and Tony Dutznik).

The combination of inexpensive online fares, convenience, availability of on-board technology, and "social proof" of this travel mode likely attracts Millennial passengers. A 2011 survey by the Chaddick Institute reveals that 48 percent of all adult passengers are between 18- and 25-years old, and 73 percent of all passengers are between the ages of 18 and 35 (Schwieterman & Fischer). Industry data support researchers' collected survey data. About fifty percent of Megabus's ridership and seventy-five percent of BoltBus's ridership are between the ages of 18 and 34 (Austen). Survey research affirms that more females ride curbside carriers than males, and women account for a greater share (54.7 percent) of curbside bus passengers over the age of 35

(Schwieterman & Fischer, 2011). BoltBus and Greyhound believe that young women are more attracted to BoltBus (64 percent of riders are women, compared to 55 percent and 49 percent of Greyhound riders in the Northeast and outside the Northeast respectively) because they do not feel safe using bus terminals (David Hall).

The social influence of curbside intercity bus customers has helped spread the word and increased the popularity of this mode of transportation among the Millennial generation. The phenomenon known as social proofing, or informational social influence, helps explain why long lines of customers waiting to board at curbside locations intrigue customers. In other words, the herd mentality assumes that if others think it's cool to ride one of those double-decker buses, then it's obviously the best way to travel—right?

In fact, social media and websites use the social proofing phenomenon to create a social buzz about a business, product, or service such as travel by curbside bus. For example, Yelp.com, an online business directory with over 100 million customers, has a business review site that provides customer reviews and ratings. Yelp also allows a reviewer to publish their comments, customer experience (good or bad), and business rating on other social media sites. While Yelp is funded through advertisements, many people trust the online reviews because they seem to provide authentic, informed opinions about a business. For example, the following Yelp review rated BoltBus transportation and compared it to MegaBus and Chinatown buses:

Figure 2: Yelp customer review and rating of BoltBus (Yelp.com)



For an experienced bus traveler, I would have to say BoltBus is def one of the more reliable bus companies after using them numerous times. I have used Chinatown bus and Megabus and would use Bolt any day over them. I started using Bolt after the Chinatown buses were suddenly shut down. I also use Bolt because it also stops in Cherry Hill which is closer and more convenient for me which Chinatown bus also allows you to get off at but Megabus doesn't.



Figure 3: BoltBus invites tweets from riders (BoltBus.com)



Figure 4: Megabus has over 140,000 "likes" on Facebook (megabus.com)

Price and Travel Time between Penn Stations

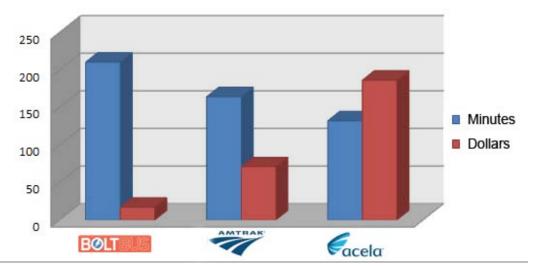


Figure 5: Blog post comparing price and travel times of BoltBus, Amtrak, and Acela (RapidTransient.com, 2012)

A blogging website, operating under the domain name of Rapid Transient, featured a post on January 31, 2012 that compared both the travel time and costs to travel by BoltBus, Amtrak's Northeast regional rail, and Amtrak's high-speed Acela service from Baltimore, Md. to New York City's Penn Station. While the website's social capital value is unknown, the post does invite other tech-savvy transit and urban planning enthusiasts to weigh in as to whether the savings in travel time is worth the cost of more expensive modes.

Corporate companies are using social media to entice prospective and current customers to "like" them on Facebook and "follow" them on Twitter. Companies invite fans to connect with them through social media to share their travel experiences, enter special contests, provide service advisories, advertise travel specials, conduct impromptu polls, address questions, and showcase special events.

Finally, industry advocates and the federal government have joined the social media bandwagon to address consumer concerns regarding motorcoach travel safety. The American Bus Association's (ABA) website provides a searchable link that allows consumers to search by zip code, city, state, or company name to find a particular motor carrier's safety performance "snapshot" by the Federal Motor Carrier Safety Administration (FMCSA) (ABA.com). ABA's website also links to the Charter Bus Connect website with blog posts on motorcoach safety. FMCSA's website provides extensive outreach and education information. FMCSA's website provides access to a National Consumer Complaint Database, Company Safety Profile (CSP), and information on how to download a new SaferBus App to obtain details on a particular motor carrier's safety performance (FMCSA.com). FMCSA will need to determine how to promote the app to the general public, and encourage other federal, state, and local partners to spread the word.



Figure 6: SaferBus Mobile App (FMCSA.com)

Competitive, Inexpensive Fares

As a result of industry deregulation, bus companies have considerable freedom to determine and set fares for bus routes ("The Changing Face of Transportation"). This price-setting flexibility facilitated "price wars" between bus companies to gain a dominant market share in popular, heavily traveled routes. Bus company rivalries have been heightened as a result of increasing competition from the deregulated airline and motor-carrier industries (Walsh "Bus Industry").

This new industry offers competitive rates on express routes between major cities by reducing overhead costs that are typically incurred by traditional bus carriers operating out of terminals. Curbside carriers often have no staff other than the bus driver or a ticket collector. Curbside locations have few seating, restrooms, concession kiosks, shelters, or other traditional bus terminal amenities, so companies pass on these savings to customers. Operators often locate curbside stops near transit, which enables bus passengers to use available amenities and infrastructure without additional cost to bus companies.

Bus fares are relatively low compared to air or rail fares. Keeping bus fares low allows carriers to market to key demographic groups that may be unable or unwilling to pay for other modes of transportation between major urban areas. Operators such as Megabus and BoltBus offer an airline-style, yield-management pricing scheme that offers at least one ticket for a dollar per trip, with nominal booking fees (Klein 2011 5). This pricing model also provides marketing hype by allowing corporate carriers to offer at least one ticket per bus trip at the price of one dollar (Austen). While most passengers do not receive the one-dollar fare, it does create publicity and offers an incentive to book travel early. Ticket prices fluctuate based on demand, day of travel, peak travel times, and travel-reservation period. For example, it is cheaper to book mid-week travel at least four weeks in advance than purchasing a last-minute ticket for weekend travel during a holiday. Chinatown buses typically offer low, flat rates where customers have the option to purchase a ticket online, onboard, street-side, or at storefront locations (Klein 2011 5).

Convenient, Online Ticketing

While traditional bus companies now offer online ticket bookings, there may be an additional surcharge to guarantee a seat on a specific bus. For example, with Greyhound, a reserved seat that guarantees a spot on a bus, which is scheduled to leave at a specific date and time, costs more than a standard ticket.

In contrast, with major corporate curbside intercity bus carriers, an online ticket-purchase guarantees a seat on a specific bus (Stellin). Traditional bus companies like Peter Pan and Greyhound are now beginning to offer new express bus services that are modeled after curbside carriers. Both Peter Pan and Greyhound express offer short-distance, non-stop or one-stop transit service originating from major urban hubs. Non-refundable, discount tickets can be purchased either online or at self-service, on-site ticket kiosks to obtain a guaranteed seat.

It is interesting to note that the purchase of tickets online for corporate curbside intercity buses requires an electronic payment. Excluded from booking travel by intercity bus online are low- to-moderate income people who lack devices to make electronic (e)-commerce purchase, lack sufficient funds make debit card purchases, or are unable to qualify for credit cards. This method of payment may also weed out those who use low-cost buses that accept cash payments to exploit the surface transportation system for covert or unlawful activities. While traditional bus companies (e.g., Greyhound) may offer advanced-purchase tickets online, these tickets cost significantly less than purchasing walk-up, refundable, or other fare types offered. For example, an advanced ticket fare for Greyhound bus travel from New Orleans to Houston was \$18 versus the walk-up fare of \$67 (Greyhound—Fare Finder). While most Greyhound customers have access to the Internet but lack credit cards to purchase tickets online, ninety-nine percent of BoltBus customers surveyed had access to the Internet and use credit cards for the purchase of online tickets (David Hall).

Modern Marketing

Curbside bus companies are using modern marketing to advertise. Chinatown buses typically rely on word-of-mouth and signage like that in New York City's Chinatown. Corporate carriers have embarked on a different path, part of their divergence from their more traditional predecessors. Megabus, BoltBus, as well as many other corporate carriers, use their own buses as advertising—with brightly colored paint hawking low fares. In contrast, many Chinatown carriers' buses do not carry any such branding except the USDOT number required by federal law, and sometimes not even that.

Megabus employed public relations firm Hanser & Associates in 2005, which used a marketing strategy to promote the company (as Coach USA) (Ryan Hanser). Megabus uses Twitter, Tumblr, Facebook, and other social media sites to direct customers to its website. Hanser reports the website gets, on average, two million users per month. The company also regularly works with media and the company believes the resulting news-media coverage would have cost over 100 million dollars if they had purchased it directly (Hanser).

Both Megabus and BoltBus rely less on traditional advertising such as magazines, radio, television spots, and billboards. In a departure though, Megabus debuted its first television commercial in Texas in June 2012, and they currently sponsor NASCAR driver, Jason Bowles (Schwieterman et al., 2013). This may be an attempt to appeal directly to the e-commerce market and to diversify their customer base. Megabus primarily uses targeted Internet ads and press coverage. DC2NY and Vamoose rely primarily on word-of-mouth traffic and signage at stops, though both employ media or public relations staff (DC2NY) (Vamoose).

Greyhound chose Butler, Shine, Stern & Partners as their public relations and advertising agency to introduce BoltBus as a separate entity. BoltBus does not have the household recognition that Greyhound does, and as such, does not have the associated baggage of negative perceptions (Rupal Parekh). BoltBus uses the slogan "bolt for a buck," a lightning bolt logo, and bright orange design on their buses and in advertising (Parekh). BoltBus used on-the-ground promoters in their public relations campaign, but both BoltBus and Megabus have not needed to use traditional advertising. Both companies use social media extensively.

Megabus has an application for smart phones to sell tickets and track buses in real time. Additionally, because users often elect to receive an email when they book a ticket online, Megabus can alert customers about promotions, including free tickets. Megabus even sent a poem and advertisement for St. Valentine's Day in 2013 encouraging travel to see loved ones. In December 2007, Megabus gave away 100,000 free tickets as a promotion (Schwieterman, 2008); and since then, it has often done the same when it begins new hubs or routes to new cities, and uses press to encourage ridership. Company officials are often quoted in press releases stating they hope to stimulate travel, that "there's no reason to stay home," and that their bus service can "stimulate the economy" (Megabus.com offers 100,000 free seats to stimulate travel in 2010).

BoltBus, DC2NY, and Vamoose have rewards programs. BoltBus's incentivizes repeat travel with the offer of a free ninth ride; and unlike most airlines, the number of miles one travels does not factor into rewards (BoltBus). BoltBus and Megabus, as well as some of the smaller carriers, appear to want to create loyalty through community belonging and social media presence. Members of BoltBus's loyalty program enjoy benefits of boarding first and are eligible for a free one-way ticket trip after eight trips on BoltBus (Hugo Kugiya). With the yield-management pricing scheme, loyalty is important especially as prices rise and fluctuate.

Innovative, Bus-Tracking Technology

Megabus.com recently launched a new bus tracking application that enables passengers and customers to track bus departure or arrivals from a smartphone. The company is able to provide this by utilizing state-of-the-art tracking technology not available with any other curbside bus company, but increasingly common on public transit in many cities. In Elizabeth, N.J., operations managers monitor individual buses on large screens that track the current speed of each bus, and track driver information. Operations managers and bus drivers can communicate through a screen directly and quickly (B. Chamberlain, personal communication, March 27, 2013). A Megabus official said a state-of-the-art monitoring system helps address safety, and traffic delays, as well as other company issues.

Hassle-Free Travel

Curbside bus travel has become more attractive as airline travel after September 11, 2001 became much more complicated (New York City Chinatown Bus study 1). Due to terrorist concerns after the September 2001 (9/11) attacks, the Transportation Security Administration (TSA) initiated more arduous and time-consuming screenings to enhance security of passengers boarding airplanes (TSA). After 9/11, more travelers turned to alternative modes, including rail and bus (Schwieterman 2010 3). The post-9/11 downturn in tourism encouraged Chinatown carriers to turn to intercity travel rather than charter buses (Chen 2). While reports indicate that airline travel has recovered to normal pre-9/11 levels, hassles remain with advanced airport check-ins and more thorough TSA security screenings (Milmo). Therefore, the intercity curbside bus industry has won over many travelers who have tried and liked the low-cost and convenient travel experience.

However, buses are not without complications. As recently reported in the *New York Times*, several curbside bus users described their dismay with late buses and disorganized loading processes (Stellin 27 August 2012).

Response to Rising Gas and Toll Prices

The average price for a gallon of gas in the United States in 2001 was \$1.53. In 2008, the national average reached \$3.38 per gallon of gas, and spiked as high as \$4.14 per gallon during that summer (Bureau of Labor Statistics). Gas prices remain volatile and unpredictable. The week of July 29, 2013, the national average for a gallon of gas was \$3.64 (Energy Information Administration, 2013). As gas prices rise, studies have shown that driving habits change (Congressional Budget Office).

Highway, bridge, and tunnel tolls on I-95 also add to the cost of travel by passenger automobiles. For example, one-way travel on I-95 north from Baltimore, Md. to Manhattan, N.Y. via toll roads, bridges, and tunnels on the John F. Kennedy Memorial Highway, Delaware Turnpike, and New Jersey Turnpike could cost as much as \$37.85 (The I-95 Exit Guide). Rising automobile travel costs are prompting drivers to consider other travel modes, including curbside intercity buses.

Attractiveness of On-Board Technology and Amenities

Most corporate carriers run fleets of new buses equipped with Wi-Fi and electrical outlets (Klein 2011 5). The carrier DC2NY first offered Wi-Fi in 2007 and it quickly became an industry standard (Schwieterman, et al 2009, 6). BoltBus advertises extra legroom, leather seats, free under-carriage storage of one bag or bike, and boarding in groups to avoid crowding (BoltBus). These amenities set the new curbside industry apart from the old-line, traditional companies. To better compete with new curbside intercity bus carriers, Greyhound and Peter Pan have begun to offer Wi-Fi, increased legroom, and guaranteed seating. Greyhound unveiled a new, elite service operating in a limited geographical area called Greyhound Express (Greyhound).

4.5 Positive Impacts and Benefits of Industry Growth

Environmental Benefits of Bus Travel

The Motorcoach Marketing Council, a coalition of motorcoach operators, vendors, associations, suppliers, vendors, and travel and tourism partners seeking to improve the industry's image, recently launched a "Get Motorcoachified" public awareness campaign. This campaign touts the "ultra-green," convenient, safe, fun, and cost-effective benefits of motorcoach travel. The educational outreach is designed to promote public awareness of the eco-friendly benefits of bus travel. The council notes that taking a motorcoach over long distances potentially takes 55 cars off the roads and yields the lowest emissions of all public transit methods (Motorcoach Council, 2010).

In addition to lowering harmful emissions, curbside intercity buses, motorcoach carriers, and public transit systems are also lauded for their ability to reduce overall fuel consumption and reduce vehicle miles traveled (VMT) by car. Little research has been conducted regarding the curbside intercity bus industry's impact on VMT reductions. However, studies by the Chaddick Institute for Metropolitan Development at DePaul University indicate that this fledgling industry is already reducing 11-million gallons of fuel each year (Fischer, *Environmental Practice* 7). In addition, carbon emissions are being reduced by 242-million pounds per year (Fischer, *Environmental Practice* 7).

Mode Shift

The Chaddick Institute specifically examined whether curbside buses are reducing car travel. When analyzing this, it was difficult for researchers to determine whether bus riders are enticed to travel more by the low-fare availability, which the Chaddick Institute calls a "stimulating effect," or whether travel by bus is replacing transportation by car or other modes (Schwieterman 2010 7-8). The Chaddick Institute conducted a survey of curbside bus passengers to determine whether consumers would either take another mode or not travel, if the specified curbside bus route was not available. Eighty percent would have taken another mode, and the remaining 20 percent would have forgone travel (Schwieterman and Fischer 2010 10). Of this 80 percent, 17 reported they would have flown with a commercial airline to their destination, 27 percent would have driven a personal car, 22 percent would have traveled via an intercity rail line, and 14 percent would have taken a traditional bus line (Schwieterman and Fischer 2010 10). The study determined that the decrease in fuel consumed and carbon emitted caused by the emerging curbside industry is equal to 23,818 cars taken off the road (7).

If growth continues, buses could have a significant impact on modal shift. According to JetStream, an industry analyst, nine percent of Megabus riders shifted from air travel and the majority of Megabus's ridership is diverted from car travel (Strategic Partners & Associates, 2012). An estimated 65.2 percent of travel by air, rail, or bus between Washington, D.C. and New York City was by curbside intercity bus in 2011 (Strategic Partners & Associates, 2012).

This is obviously just for a short distance (97 miles) from Philadelphia to New York City so air travel is not a very viable alternative. The Chaddick Institute's 2011 passenger survey reveals that 22 percent of riders on curbside buses would not have traveled if the service were not available and 34 percent of those on the east coast would have taken the train (Schwieterman & Fischer, 2011). Passengers, they conclude, are not shifting from traditional companies, but from air, personal car, and train which contributes to the point that this industry is not merely a resurgence of the long history of intercity bus travel, but a new era that has profound implications.

As previously mentioned, Drexel University's LeBow College of Business conducted a BoltBus Passenger Survey for an economic impact analysis of BoltBus operations on the City of Philadelphia. One portion of the survey examined mode shift and induced travel. Nearly half of the respondents (47%) would have traveled via Megabus if BoltBus were not available.

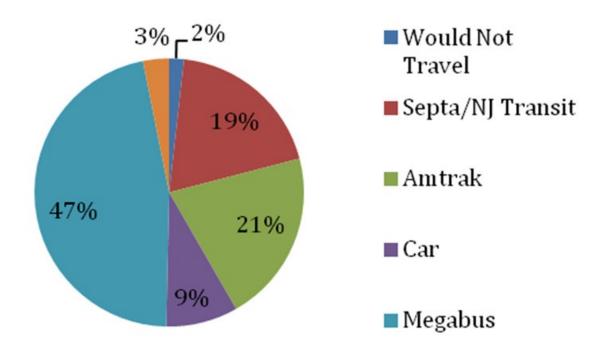


Figure 7: Which other modes of transportation would you have chosen if you did not use BoltBus? (Drexel LeBow – BoltBus Passenger Survey Data – June 2012)

Therefore, curbside intercity bus travel is the preferred mode of transportation by these respondents. Travel by rail—either regional rail or Amtrak—was selected as the second choice mode of transportation by survey respondents. Only nine percent of respondents indicated that travel by personal automobile was an option; less than two percent of respondents would not have traveled if BoltBus were not available.

Vehicle Miles Traveled (VMT) Reductions and Congestion

To measure the fuel savings from expansion of the curbside bus service industry, the Chaddick Institute examined changes in fuel consumption attributable to changing passenger travel behavior. In the fourth quarter of 2009, conventional buses handled an average load of 25.1 passengers while curbside bus departures handled an average load of 36.6 passengers. In addition, curbside buses averaged 196-passenger miles per gallon burned versus traditional intercity buses that averaged 136 (Schwieterman and Fischer 2010 9). The analysis concluded that curbside intercity buses reduced net fuel consumption by 65 percent during the study period. In addition, this mode removed about 1.57 million private automobile passengers from the highway system annually, one million passengers from the airline network, and more than two million from the rail and conventional bus sectors combined (Schwieterman and Fischer 2010 10).

A report published by the Urban Land Institute (ULI) affirms that diverting people from car travel to other modes of transit is one strategy to lower surface-

transportation energy consumption (Moving Cooler 7). A 2009 study conducted for the Federal Highway Administration (FHWA), Impacts of Higher Fuel Costs, also assessed impacts of higher fuel costs on the demand for surface passenger transportation in the United States. Specifically looking at VMT declines in 2008 over 2007 due to fuel price volatility, several positive impacts were noted in the United States, including (Brand 2009):

- A small decline in traffic congestion;
- Reduction in fuel consumption; and
- Increase in annual transit ridership; but only a small fraction of highway travel is being diverted to transit.

In addition, one long-term passenger transportation system impact of higher sustained fuel costs is fewer VMT, including (Brand 2009):

- More "trip chaining" to maximize efficiency of urban activities;
- Shorter highway commutes and more commutes via rail, bus, and transit;
- Reduced long-distance commutes by all modes; and
- Increased market for all public surface transportation modes.

If curbside intercity buses are indeed reducing VMT, it is logical to assume they will also have an impact on lowering emissions, fuel consumption, and global warming. Impacts of higher fuel costs on demand for surface transportation in the United States can serve as a potential transportation policy lever regarding VMT vs. fuel-based taxes, car pricing/rebate incentives, tax vs. regulatory policies, and FHWA program delivery.

Curbside Industry as an Economic Engine

The motorcoach service industry is comprised of companies that provide services to contract commuters, intercity scheduled services, airport shuttles, sightseeing, tours, and charters. Charter and tour services dominate the bulk of the motorcoach industry—scheduled services make up only 19 percent of the industry. There are three categories of intercity scheduled services (ABA Motorcoach Census 2011, 5):

- 1. Intercity bus services with nationwide shared ticketing (interlining) and express (point-to-point) services that service both curbside and terminal locations;
- 2. Commuter services (i.e., buses that carry commuters between cities and suburbs during peak service hours); and
- 3. Casino services.

According to the American Bus Association (ABA), the industry serves as a substantial economic engine within the United States. The industry employs about 128,000 people and generates \$112.7 billion annually. About 3,200 companies operate 35,000 motorcoaches that collectively transport 723 million passengers. The curbside intercity bus industry has experienced a huge surge in business since 2006. While there was a consolidation in departure points and actual decline in industry growth between 1980 and 2006, there has been a recent resurgence and industry recovery.

According to a recent Chaddick Institute report, growth in the intercity bus industry continues to surge. The Chaddick Institute notes that for the fourth consecutive year, scheduled bus service grew faster than other modes of intercity transportation, including air travel. The Northeast I-95 corridor supports the highest level of intercity bus services.

Since the emergence of curbside operations in 2006 there has been a 32 percent growth in departures, and ridership has seen consistent growth. The largest percentage of annual growth of the intercity bus industry was experienced in 2008 (9.8 percent). Services grew by 5.1 percent in 2009, and 6 percent in 2010 (Chaddick Institute 2013).

The report notes that in the one-year period between 2010 and 2011, scheduled departures for the intercity bus industry increased 7.1 percent to 2,693, compared to a 5.1 and 1.2 percent growth respectively in airline-seat miles and rail-seat miles. Figure 8 illustrates the industry's growth trend since 2006.

The report also indicates that industry leaders BoltBus and Megabus experienced a 32.1 percent growth by expanding their number of departures from 589 to 778 (Chaddick Institute 2013). Growth was primarily attributed to the addition of three new service hubs—Pittsburgh, Pa. and Atlanta, Ga. (Megabus) and Newark, N.J. (BoltBus). Megabus also cites a surge in ridership. It has served 25 million customers as of March 2013, and operates in over 130 cities (Megabus).

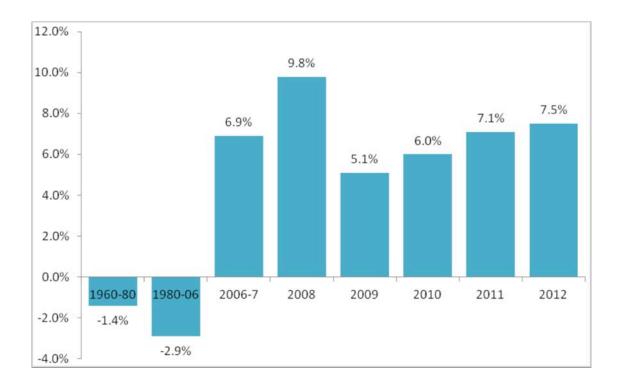


Figure 8: Changing Level of Intercity Bus Service Percentage of Annual Growth & Decline (Schwieterman et. al, 2013)

Impact on Tourism Industry

Tourism represents a significant part of the national, regional, and local economies. The curbside intercity bus industry is recognized as a low-cost means of travel, but also supports the tourism industry in metropolitan areas and resort destinations. Curbside intercity buses bring dozens of travelers and tourists that spend money on related services upon their arrival. According to Peter Pantuso, CEO and president of the ABA, intercity bus riders usually purchase roundtrip tickets, stay approximately four to five days and spend about \$92 per day (IPA policy forum summary notes). In addition, the intercity bus industry has an economic impact on approximately 3,000 tour operators, destinations, attractions, convention and visitors' bureaus, hotels, and restaurants. Companies that manufacture motorcoaches and those that provide equipment and services to bus companies, also benefit economically (ABA.org).

In Philadelphia, BoltBus employs 23 people. Drexel's survey found that approximately half of BoltBus riders (originating or departing from Philadelphia) were residents of the metropolitan area and half were visitors. Seventy-seven percent of visitors spent money in restaurants or bars, and 55 percent spent money at retail establishments. In addition, 44 percent of residents visited restaurants or bars and 39 percent of residents went shopping (Antolin et al., 2012).

Demand-Responsive Travel Mode

One of the greatest assets of the intercity bus industry is its responsiveness to customer demands for service. Intercity buses offer low-cost, affordable fares with limited overhead, guaranteed seating, close proximity to intermodal connections, and onboard amenities. Unlike high-speed, regional, and commuter rail systems that use fixed-rail infrastructure, the intercity bus industry has greater operating flexibility. New routes can be planned, implemented, and changed in response to customer demands.

In fact, the most significant characteristic of the curbside model is the expediency in recognizing a need, creating a route to fill that need, and removing a route when demand is no longer sufficient. Ticket sales are primarily conducted online. Changing website content to announce a new route requires low effort and little expense. Because a curbside is used, buses that operate with limited state or local restrictions need only to be advertised and show up for waiting customers. Even in cities where intermodal facilities are used, curbside intercity bus companies need only minimal investments in infrastructure, licensing, staffing, and signage to operate at a curbside location.

As previously stated, companies respond to niche market demands by expanding services to college towns, new service hubs outside traditional service areas, and new tourist and suburban destinations. They are now offering more upscale amenities to appeal to new demographic groups. In addition, curbside bus routes' emphasis on point-to-point travel appeals to what Schwieterman calls a "transit lifestyle"—one that does not rely on car travel. He notes that no other mode of transportation has accomplished this in over half a century (2010 8). This is a role many high-speed rail advocates likely had hoped rail would fulfill.

Unlike fixed-route rail service, curbside intercity buses can also respond to a decline in a demand for service. For example, Megabus discontinued its California service based out of Los Angeles in 2008, due to low ridership (Andrea Chang). However, it recently reintroduced service to California and Nevada as of 2012 (Megabus).

Megabus Senior Vice President of Business Development John Emberson stated that Megabus determines routes in several ways. They respond to requests for service, pilot-test the routes, and are able to discontinue routes if deemed unprofitable. Megabus works with smaller cities to determine locations that would best serve the population. However, it was not clear whether cities typically seek out and make requests to Megabus or if the company usually approaches a city (IPA policy forum summary notes).

5. Transportation Policy Issues Related to Industry Growth

While growth of the curbside intercity bus industry has been remarkable, given the tenuous economy, high-profile accidents have heightened concern for safe motorcoach operations. Unethical operators have blemished the industry. Unscrupulous companies operate unsafely to cut costs; chameleon carriers change identities to evade enforcement; and ill-informed operators have denied equal transportation access to patrons with disabilities. Cities and other destinations are also dealing with how to accommodate, manage, and even regulate the burgeoning growth in demand for use of limited curbside space.

5.1 Safety

Compared to other transportation modes, travel by motorcoach is relatively safe. However, there have been several recent high-profile intercity bus accidents, which have captured the attention of the public, and that have resulted in injuries and fatalities of bus passengers, drivers, and other motorists. Two federal agencies are primarily responsible for overseeing motorcoach safety. The National Highway Traffic Safety Administration (NHTSA) has statutory authority to administer motor vehicle safety laws under the U.S. Code. NHTSA conducts research and issues motor vehicle safety standards, rulemaking, and directives including those that pertain to equipment on new motorcoaches (NHTSA). FMCSA is responsible for the issuance, administration, and enforcement of safety regulations for the interstate motor carrier industry.

Driver-Related Problems Cited as Prime Motorcoach Safety Issues

NHTSA is promulgated under the U.S. Code to develop safety standards for new commercial motor vehicles and equipment, including motorcoaches. NHTSA may also be directed to issue safety standards to retrofit vehicles subsequent to initial manufacture. Priorities for rulemaking and research has been to consider new motorcoach safety and equipment standards including lap/shoulder belts, fire safety, emergency evacuation, and roof strength.

FMCSA has focused on determining the causes of motorcoach accidents and strategies to improve safety. In April 2009, Secretary of Transportation Ray LaHood instructed key agency leaders within the United States Department of Transportation (USDOT) to develop a Motorcoach Safety Action Plan to identify factors affecting motorcoach safety and strategies to improve deficiencies (USDOT 2009 3). The Motorcoach Safety Action Plan team reviewed safety data from 1998 to 2008 to identify several factors

that resulted in the majority of motorcoach crashes, fatalities, and injuries: driver fatigue, medical condition of the driver, driver inattention, vehicle condition, and road condition (USDOT 2009 12). Of these factors, driver-related problems (i.e., driver fatigue, medical condition of the driver, and inattention) were responsible for 56 percent of the studied accidents between 1998 and 2008 (USDOT 2009 12). In addition to driver fatigue, fatal motorcoach accidents were attributed to vehicle rollover, striking roadside objects and running off road, multi-vehicle collisions, occupant ejection, and operator maintenance (USDOT 2009 3). The below graph illustrates driver-related problems as the primary root cause of NTSB-investigated motorcoach crashes.

Root Cause of NTSB-Investigated Motorcoach Crashes

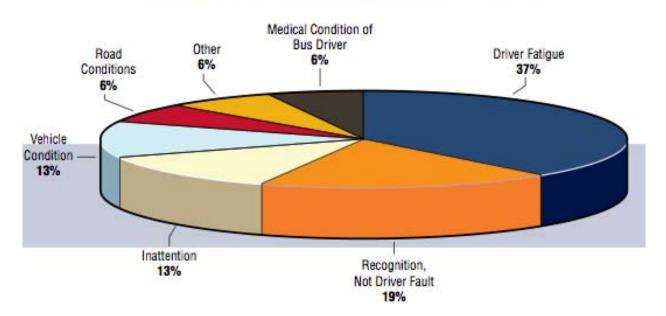


Figure 9: Causes of NTSB-Investigated Motorcoach Crashes (USDOT 2012, 8)

An updated MSAP was issued in 2012. The plan incorporates input from a 2011 Motorcoach Safety Summit; highlights integrated activities being undertaken by DOT and other partner agencies underway; and expands and focuses on several motorcoach safety issues including two related to driver safety—driver fatigue and driver behavior. The updated plan notes that during the 10-year period between 2001 through 2010, there was an average of 17 motorcoach occupant fatalities per year (USDOT 2012 3).

Safety Issues Identified during NTSB Investigations

The National Transportation Safety Board (NTSB) is an independent, federal agency authorized by Congress to investigate aviation and surface transportation accidents, provide objective recommendations, and coordinate federal assistance to families of accident victims (NTSB website). From 1998 to 2010, NTSB investigated 19 accidents of all types of motorcoach buses, which resulted in 140 fatalities. Key safety issues identified as factors in motorcoach crashes included (NTSB 2011, 17):

- Motorcoach driver-related issues:
 - Fatigue
 - Speeding
 - Lack of qualifications
 - Electronic device distractions
 - Medical problems
- Motorcoach carrier issues:
 - Repeated safety violations
 - Unqualified mechanics
 - Out-of-service carriers reincarnated as new carriers with different names

An October 2011 NTSB document, titled *Special Report: Report on Curbside Motorcoach Safety*, described outcomes of an ongoing motorcoach safety investigation that has a specific focus on curbside intercity buses. The investigation determined that while motorcoach travel is generally safe, "infrequent, curbside carriers have higher fatal accident and death rates and higher out-of-service rates resulting from driver violations (specifically fatigued driving and driver fitness violations) compared with conventional carriers" (NTSB 2011, ix). The report cited a University of Michigan Transportation Research Institute (UMTRI) study, which identified three risk factors for driver errors associated with fatal accidents: 1) previous driving violations, 2) previous accident history, and 3) operation of an intercity or charter/tour bus (NTSB 2011, 17).

Motorcoach driver fatigue, speeding, English proficiency of drivers, smaller carriers with poor safety records, and reincarnated carriers that evade compliance reviews and regulatory measures were cited as significant factors in a motor carrier's safety performance. The report concluded that curbside motorcoach safety "is strongly influenced by the management of carriers that own these vehicles and the drivers that operate them" (NTSB 2011, 58).

Recent Accidents in the New York to Washington, D.C. Corridor

In recent years there have been several high-profile motorcoach accidents. A particularly bad year was 2011; 28 occupant fatalities resulted from 8 serious motorcoach crashes (USDOT 2012, 3). Between March and August 2011, there were four major motorcoach accidents reported within the New York to Washington, D.C. corridor. Many of these recent motorcoach accidents are still being investigated or studied. Due to the current nature of these accidents, a significant amount of the information available comes from periodicals and other news sources. NTSB has released either preliminary report or press releases, pending online publication of final report, for these accidents.

Causes of Accidents

News articles, NTSB preliminary reports, and press releases cited in the list of motorcoach accidents in 2011 (below), indicate several factors that may have caused the accidents including traveling at high speeds, bus drivers unfit for duty, high traffic volume, and interference by other vehicles.

Wide Tours Accident, March 12, 2011 – NTSB Chairperson Deborah Hersman noted, pending release of the final report, that this crash was one of the deadliest bus accidents ever investigated by NTSB. The motorcoach had reached its top speed of 78 mph traveling southbound on I-95 from Connecticut's Mohegan Sun Casino moments before the accident. The motorcoach departed the roadway, struck a guardrail, and overturned with its roof panel torn in its entirety. Driver fatigue and vehicle speed were believed to be contributing factors ("NTSB Press Release" June 2012).

Super Luxury Tours Accident, March 14, 2011 – According to state police assigned to the initial investigation, this accident occurred after the bus drifted off of the southbound lane of the New Jersey Turnpike (near Exit 9) and ran into a concrete overpass support ("Bus Company in Fatal N.J. Crash Flagged for Safety Violations"). Drivers for the Super Luxury Tours Company had previously been cited for numerous traffic and safety violations, including speeding and failure to obey traffic signals ("Tour Bus Company in Fatal N.J. Turnpike Crash Has among Worst U.S. Driver Safety Records").

Sky Express, Inc. Accident, May 31, 2011 — The NTSB preliminary report indicated that the bus accident occurred as the driver attempted to navigate a left-hand curve along northbound I-95 near Doswell, Virginia. As a result of the accident, the bus experienced extensive damage to the roof and other support structures. With the exception of the driver's seat, the bus was not equipped with seat belts ("Preliminary

Report – Sky Express"). A NTSB press release, issued pending release of the final report, indicates, "This crash should never have happened and was 'entirely preventable." Factors contributing to the accident were driver fatigue, unsafe operations, and Sky Express Inc.'s lax safety oversight and continued disregard for federal safety regulations ("NTSB Press Release" July 2012).

Table 3: Major Motorcoach Crashes in 2011

Photo of Incident	Date	Bus Company	Location	Fatalities/ Injuries
269 209	http://topics	World Wide Tours David Karp/AP. 2011 S.nytimes.com/top/res	ference/timestopics/sul	Fatalities -15 Injuries - 18 bjects/w/world_wid
	3/14/11 Photo credit:	Super Luxury Tours	New Jersey Turnpike (SB), East Brunswick, N.J.	Fatalities - 2 Injuries - 40
	http://photos.nj.com/star- ledger/2011/03/fatal_nj_turnpike_bus_crash_15.html			
	5/31/11	Sky Express Inc.	I-95 (NB), Caroline County, Va.	Fatalities - 4 No reported injuries
	Photo Credit: Steve Helber/AP. 2011. http://www.msnbc.msn.com/id/43235384/ns/us_news- crime_and_courts/t/sky-express-bus-crashed-after-feds-delayed- shutdown/#.UCocoKD-1fY			
	8/24/11	D.C. Trails on Tour	New Jersey Turnpike (SB), South Brunswick, N.J.	No reported fatalities Injuries – 14
The same of the sa	Photo Credit: WABC 7. 2011. http://gothamist.com/2011/08/24/1_dead_many_injured_after_dc-bound.php			

D.C. Trails on Tour Accident, August 24, 2011 — Representatives of the New Jersey State Police indicated that the accident occurred when the bus encountered heavy traffic southbound along the New Jersey Turnpike, between Exit 8a and 9. The bus struck the rear of a tractor-trailer that was stopped in traffic along the New Jersey Turnpike. According to a representative from the American Bus Association (ABA), there was no indication that the driver was fatigued ("17 Injured in N.J. Turnpike Bus Crash; 2 Critically").

5.2 Ease of Entry of New Interstate Passenger Carriers

There are few requirements to become a new interstate passenger carrier. New entrants are required to fill out a registration form (MCS-150) to obtain a USDOT number, submit a second registration form (OP-1(P)) to obtain a motor carrier number granting authority to transport passengers, pay a nominal fee (\$300) for a motor passenger carrier permit if engaged in interstate transportation, and provide proof of insurance.

Rogue bus companies often incorporate as a business in one state and set up operations at another location. Business licenses are not difficult to acquire and need not be for motorcoach operations. Bus companies with safety violations may cheaply re-license their operations within another state under another company name or with one that shares ownership and/or an affiliation, in order to avoid enforcement action. Because business licensing at the state or local level is not often crosschecked with USDOT interstate operating authority numbers, many bus companies with unethical business practices simply fall through cracks of enforcement.

5.3 Reincarnated/Chameleon and Re-Entrant Carriers

A 2011 Motor Carrier Safety Advisory Committee (MCSAC) task force report to FMCSA describes patterns of safety violations by motorcoach management—specifically issues with reincarnated/chameleon and re-entrant carriers. The term "reincarnated/chameleon carrier" is defined as "a carrier that attempts to register as a new entrant and attempts to operate as a new entity to evade detection or consequence for a prior or ongoing non-compliance" (MCSAC 2011 3). "Re-entrant" carriers are defined as an entrant with prior motor carrier experience that applies for a new USDOT number. A common tactic used by re-entrant carriers to evade enforcement action is to simply shift operations to another existing carrier that has interstate operating authority under another USDOT number. Consumers are often unaware that some unethical motorcoach operators have simply changed the name of their company, re-registered for a new USDOT number, or use multiple DOT numbers to evade enforcement action.

5.4 Lack of Transparency of Ticket Brokers

Moreover, there is lack of oversight of bus and motorcoach transportation brokers. Bus brokers serve as intermediaries by selling tickets online and arranging transportation between motor carriers and passengers, for a fee. Bus brokers are not required to register with USDOT or obtain operating authority from FMCSA. Selling bus tickets via online ticket brokerage services is somewhat of a shell-game tactic—passengers may not realize that the bus broker is not the actual provider of transportation services. Passengers may unwittingly purchase a ticket from a bus broker and end up traveling with a bus company that has a poor safety record. The lack of transparent ticket sales by brokerage services makes it impossible for prospective passengers, or even regulators, to know whether bus companies providing the actual transportation services are operating safely or legally.

5.5 Security

On August 3, 2007, Public Law (PL) 110-53, "Implementing Recommendation of the 9/11 Commission Act of 2007," was enacted. The purpose of the law was to implement the recommendations of the National Commission on Terrorist Attacks Upon the United States (i.e., 9/11 Commission) in order to provide a set of comprehensive measures to assist high-risk metropolitan areas in preventing, preparing for, protecting against, and responding to terrorist acts. Authorized by Congress and implemented by the Department of Homeland Security (DHS), the legislation also authorized grants and funding totaling \$21 billion through September 20, 2012 to improve responsiveness of "critical infrastructure" sectors—including the transportation sector (110th Congress Public Law 53).

Title XV, Subtitle C (§ 1531) of PL 110-53, focused on over-the-road bus and trucking security measures. With respect to transit operators, DHS was directed to issue regulations requiring transit operators, assigned in a high-risk tier, to voluntarily conduct a vulnerability assessment, prepare and submit a security plan within 18 months of the law's enactment, and establish standards for developing a vulnerability assessment and security plan. Plans were to have been submitted by high-risk bus operators within nine months of the issuance of DHS regulations.

U.S. Code Chapter 6 § 1181 outlined procedures for DHS to implement a program to initiate over-the-road bus security assessments and plans; § 1182 authorized the establishment of a grant program to provide eligible private, over-the-road bus operators with funding for security improvements (6 USC 1181 and 1182). Authorized by Congress and administered by DHS, the Intercity Bus Security Grant Program (IBSGP) was part of a comprehensive set of measures designed to strengthen the

critical infrastructure of the United States against risks associated with potential terrorist attacks.

The Transit Security Grant Program (TSGP) is another DHS grant program that was established to support transportation infrastructure security activities. TSGP provides funds to the nation's "high-threat urban areas" for enhancement of security measures at critical transit infrastructure including bus, ferry, and rail systems. In order to be eligible for the grant, high-risk public transportation agencies must develop a security plan based on a security assessment and must use grant funding to address those items.

In June 2009, a U.S. Government Accountability Office (GAO) report was issued to assess mass-transit and passenger-rail security measures. The report noted that while federal and industry stakeholders had taken key measures to strengthen security, DHS's Transportation Security Administration (TSA) still faced coordination challenges, had not completed a full risk assessment, and had not maximized opportunities to strengthen security programs. The report recommended that TSA conduct a full risk assessment of mass-transit and passenger-rail systems, incorporate performance measures within the risk assessment, improve sharing of security technology information, and develop a goal-oriented plan for meeting 9/11 Act requirements (GAO).

While aviation security has received a higher priority over surface transportation security, TSA has devoted resources to improve the security measures of subways, passenger rail, and buses. TSA's Visible Intermodal Prevention and Response (VIPR) teams perform random, unpredictable baggage and security checks at transit stations and trucking weigh stations nationwide. In 2010, VIPR teams conducted 3,895 operations in "surface modes" nationwide (Patterson). A December 2011 *Los Angeles Times* article stated that TSA VIPR teams made "9,300 unannounced checkpoints and other search operations in the last year" (Bennett). The article also disclosed that DHS spent \$110 million in Fiscal Year (FY) 2011 for "surface transportation security," including the TSA's viper program, compared to more than \$5 billion for aviation security (Bennett).

A January 2009 *USA Today* article further highlighted the disparity between TSA security measures for surface transportation systems versus aviation security measures. The article noted that a TSA evaluation showed that more than 75 percent of surface transportation systems failed to meet federal DHS security guidelines established in 2007, while 96 percent of airlines achieved security requirements. It noted that 37 of the nation's 48 largest transit systems failed to comply with security guidelines (*USA Today*). It should be noted that the TSA assessment of surface-

transportation-system security measures focused on public mass-transit systems and rail. Because the report was issued prior to the explosive growth of the curbside intercity bus industry, it's presumed that the curbside intercity bus industry is not considered to be part of the "mass" transit sector and therefore was excluded from the assessment of surface-transportation-system security.

While buses carry more passengers per year than airlines, federal funding for bus security amounts to a fraction of the federal funding allocated to security initiatives for the passenger airline industry. The low priority for security of surface transportation systems, including curbside intercity buses, seems to be attributed to the following:

- Compliance with guidelines is voluntary, not mandatory.
- Private companies hold the primary responsibility for the transportation security of commercial vehicles (including over-the-road buses), passengers, and baggage/goods, rather than federal (TSA), state, or local officials.
- Due to the widespread perception that mass transit is not the target of terrorism or vulnerable to security threats, resources have been allocated based on an "intelligence-driven, risk-based approach to security."
- The nature of curbside intercity bus operations makes implementation of airport-like security measures (e.g., airport-style metal detectors and individual baggage screening) impractical and extremely difficult. Instead, VIPR random security checks have focused on terminal- or station-based surface transportation rather than intercity buses that operate from curbside locations.
- Civil liberties groups argue that random security checks, passenger searches, and baggage screenings are not warranted unless there is a credible or elevated security risk.
- While independent bus operators have been recipients of grant funding, additional financial commitments would need to be made by private companies to use available security technology.

Despite TSA and industry calls to bolster surface transportation security funding for buses, the Obama administration terminated the DHS Intercity Bus Security Grant Program for FY 2012. Justification for the termination of the grant funding was based on a determination that "awards are not based on risk assessment, and the homeland security investments in inter-city bus security should be evaluated in the context of the risks faced and relative benefits to be gained by Federal investments across all transportation sectors" (Executive Office of the President, 38).

5.6 Americans with Disabilities Act Compliance Issues

The Americans with Disabilities Act of 1990 (ADA) is a comprehensive civil rights law designed to ensure individuals with disabilities have equal opportunities, including equal access to transportation services. All public and private businesses; state- and local-government agencies; private entities providing public accommodations and service; and transportation providers and utilities must comply with the law (Title III). ADA applies to transportation services provided by state and local governments, as well as private businesses (Title III). The Federal Transit Administration (FTA), an operative agency under the USDOT, and the Civil Rights Division of the U.S. Department of Justice (DOJ) jointly share oversight in implementing and enforcing ADA transportation requirements (FTA, n.d).

ADA regulations apply to places of public accommodation (ADA Guidelines, FMCSA). Private transportation falls into this category and there are a number of obligations mandated for transportation providers. ADA requires accessibility in construction and renovations of places of public accommodation, commercial facilities, and state and local government facilities. More specifically related to the bus industry, ADA requirements ensure equal access to transportation and the accessibility of vehicles and transportation facilities (such as transit stations and bus stops).

ADA and OTRB Operators

Curbside buses present a complication to the general application of ADA regulations to transportation. Curbside buses fall into the over-the-road bus (OTRB) company category, which is defined as a bus with an elevated passenger deck over a baggage compartment. In 1998, USDOT adopted a final rule that required OTRB bus operators (i.e., intercity, charter, and tour buses) to make motorcoach modifications, or acquire or lease accessible vehicles to accommodate individuals with disabilities, on a 48-hour advanced-notice basis (49 CFR § 37.183).

The ruling was to be phased in over time, depending on the type of transportation service or size of business. Large and small operators were required to purchase accessible buses when acquiring new buses; or small operators can provide "equivalent service to passengers with disabilities." Large OTRB operators were required to have 100 percent of their fixed-route fleet accessible to, and usable by, individuals with disabilities (including those using wheelchairs) by October 29, 2012. Small operators did not have a deadline, but were required to provide "service in an accessible bus to passengers with disabilities on a 48-hour advance notice basis or provide equivalent service" (ADA Guidelines, FMCSA).

Equivalent service is defined as "service provided to passengers with disabilities that is as good as the type of service provided to passengers without disabilities (e.g., an accessible vehicle is used to provide service to the same traveling points for the same cost within the same time frame as a regularly scheduled OTRB). Equivalent service requires that passengers be allowed to travel in their own wheelchairs" (ADA Guidelines, FMCSA).

FMCSA is charged with ensuring compliance with the OTRB accessibility and other USDOT safety mandates. However, because of an issue regarding FMCSA's interpretation of their ability to enforce the OTRB accessibility regulations, a void in oversight and enforcement occurred.

To specifically address lack of ADA compliance by curbside intercity bus companies, the Over-the-Road Bus (OTRB) Transportation Accessibility Act was enacted in 2007 (H.R. 3985—110th Congress). This law added that as a condition of registration, motor carriers of passengers must be willing and able to comply with accessibility requirements to transport individuals with disabilities. The OTRB Accessibility program provided funding assistance to operators of buses in intercity, fixed route, OTRB service. Unfortunately, the OTRB Accessibility program was eliminated under Moving Ahead for Progress in the 21st Century (MAP-21), which was enacted on July 6, 2012 and became effective on October 1, 2012. Therefore, FY 2012 was the last year for discretionary awards under this program (USDOT).

Specific Compliance Cases

Despite passage of the OTRB Transportation Accessibility Act in 2007, there are cases where curbside intercity bus operators have demonstrated a poor ADA compliance record. Instances of ADA violations include refusal of transportation services, denial of equal access to transportation, lack of accommodation to transportation with service animals, denial of equal access to seating to those in a wheelchair, and lack of provision of accessible buses. Especially problematic are smaller operators that have a history of safety and ADA compliance violations. These bus companies often go out of business in one area then reemerge under a new name, in order to avoid disciplinary action.

Fung Wah — One of the most prominent examples of ADA noncompliance concerns a driver with intercity bus carrier Fung Wah, who refused to allow a blind couple to board a bus with a service animal in 2004 (Curbside Bus Industry Hearing). At a 2006 congressional hearing, Fung Wah Transportation Company President Pei Lin Liang Fung Wah stated his commitment to ADA compliance. He testified, however, that his company had difficulties dealing with inconsistent state laws, was confused about the onboard treatment of service animals and persons with disabilities, and expressed

concern over the high cost of wheelchair-accessible buses (Curbside Bus Industry Hearing 31).

Megabus – In May 2011, DOJ concluded an extensive investigation of Megabus, which was cited for a failure to provide accessibility for individuals with disabilities in 2011. Megabus agreed to a comprehensive settlement with DOJ to ensure future ADA compliance by:

- Ensuring that all buses are fully accessible to individuals with disabilities, including individuals who use wheelchairs or other mobility aids;
- Changing its online reservation system to allow persons with disabilities equal access to schedule information and reservations; and
- Paying a civil penalty to the United States and an award to a complainant who, during his trip from New York City to Baltimore, was not permitted to use the ramp on a passenger bus, and was not allowed to remain in his wheelchair on board, rather than be secured in the wheelchair, as required by federal regulations (DOJ Megabus, 2011).

Transportation Access and Equity

Since the advent of BRRA, deregulation and the transfer of federal oversight to state and local governments have altered all forms of transportation in rural America. While deregulation of intercity bus service may have improved long-haul services, low-revenue routes no longer had to be subsidized by routes earning higher profits. As a result, many bus companies combined routes, discontinued unprofitable routes, or discontinued service altogether (Fravel, 38). Locations served by intercity bus routes decreased from a high of 11,000 in the 1980s to around 5,000 locations in the year 2000 ("The Changing Face of Transportation"). The ease of entry and exit to providing bus service created by deregulation has allowed bus companies to focus their resources on the most profitable, high-population-density routes, while leaving less populated areas without bus service.

Several recent studies document that federal surface-transportation legislation has been unsuccessful in providing equal access to affordable transportation. Notably, many public transit systems fail to deliver affordable, accessible transportation to people living in rural communities and persons with disabilities.

A recent policy brief by the Rural Policy Research Institute (RUPRI) describes how federal policies and programs have impacted rural transportation investment. The policy brief cites both demand- and supply-oriented rural transportation issues. It notes that quality of life and economy are inextricably linked to access to transportation, yet coordinated multi-modal transportation systems are lacking in rural America. The brief also notes that deregulation and other federal policy decisions have contributed to underinvestment in rural transportation infrastructure and systems. Public transit systems in rural areas are underfunded, nonexistent, or lack connections to regional and national transit systems. A lack of resources, deficient technical capacity, and poor integration of transportation planning, funding, and decision making have added to the challenges of attaining adequate rural transportation investment and choice (Dabson, Johnson, and Fluharty).

Persons with disabilities also face challenges with equal access to affordable transportation. A recent report by The American Association of People with Disabilities (AAPD) and The Leadership Conference Education Fund, "Equity in Transportation for People with Disabilities," indicates that federal surface transportation legislation has failed to address barriers to transportation for persons with disabilities. The report states, "of the nearly two million people with disabilities who never leave their homes, 560,000 never leave home because of transportation difficulties" (AAPD, n.d). AAPD President Mark Perriello commented, "economic power, independent living, political participation, and equal opportunity [for persons with disabilities]—can only be realized with affordable, accessible transportation systems" ("People with Disabilities Left Behind"). The report also affirms that rural communities lack transportation options. It notes, "at least twelve million individuals living in rural communities, or 41 percent of the rural population, live in counties with no public transportation" (AAPD, n.d.). The report recommends that federal transportation policymakers address funding, coordination of programs, livability provisions, and enforcement of ADA compliance to meet the needs of all Americans (AAPD, n.d.).

While studies focus on the inadequacies of federal surface-transportation legislation in providing accessible public-transportation systems, linkages and connections between private and public transit are critical to ensure transportation equity. Private transportation systems, when linked to public transit, can provide reliable cost-effective transportation options for persons that lack mobility. Programs, policies, and funding for local transit should be better coordinated and specifically address connections and linkages to interregional and national transportation systems—including curbside intercity bus.

5.7 Impact of Curbside Conditions to Cities

Policy issues stem from the most significant difference in the curbside industry: the nature of arrivals and departures. Unlike traditional national and interregional bus companies that provide direct service to and from bus terminals (e.g., Greyhound,

Trailways, Peter Pan) in major cities, the curbside intercity bus industry utilizes curbside space as loading/unloading areas for passengers.

Curbside locations in New York City's Chinatown are estimated to host more than 2,000 departures a day (Mike Frassinelli 2). Buses emit exhaust fumes and create traffic congestion while idling, un/loading passengers, and/or parking for layovers. Sidewalk congestion is caused by conflicts among pedestrians and bus passengers boarding, disembarking, or loading luggage (New York City 18).

Environmental Impacts

Emissions and increased congestion are among the environmental issues that neighboring residents and adversaries of curbside buses decry. A October 2009 Chinatown Bus Study conducted by the New York City Department of City Planning Transportation Division raises concerns about the use of older buses by Chinatown carriers and their effect on pollution in the city. While Megabus and BoltBus typically operate new fleets, Chinatown bus operators are most often small companies running one route and utilizing older buses (New York City 18). Bus maintenance also affects environmental impact.

The combustion of fossil fuels, such as gasoline and diesel, to transport people and goods is a major source of CO2 emissions. Environmentalists are concerned with the rapidly rising emissions of greenhouse gases (GHGs)—including CO2—from transportation. The *2012 Urban Mobility Report* uses estimates of CO2 emissions as one means of characterizing the urban congestion problem. The report notes that several metropolitan areas in the Northeast Corridor—where there are substantial curbside intercity bus operations—are ranked as the nation's most congested. The Washington, D.C. and New York City—Newark, N.J. metropolitan areas are ranked in the top five congested areas; the Philadelphia Pa.—N.J.—Del.—Md. metropolitan area is ranked among the second tier of the nation's most congested areas (Schrank, Eisele & Lomax 2012 27).

The report recommends a "balanced and diversified approach to reduce congestion," including adding capacity in critical growth corridors and providing more transportation choices (Schrank, Eisele & Lomax 2012 17). While expanding/adding more public transportation options, facilities, intermodal hubs, and buses are mentioned as congestion-reducing strategies, the impact of the growth of the curbside intercity bus industry needs further study.

Congestion

Since curbside operators do not have terminals, passengers wait on the sidewalk. At curbside arrival and departure areas, hundreds of people per day may wait on already congested sidewalks, which presents a barrier to pedestrian mobility. Often, lines are disorganized and there are no separate stand-by lines for prospective passengers that hope to travel on a space-available basis. In addition to sidewalk congestion, buses that are unloading or awaiting departure also create street congestion at curbside locations. In addition, curbside intercity buses often compete for space with public transit, tour buses, and other motorcoach operations that further add to congested sidewalks. Moreover, if there are not convenient public parking areas nearby, the discharge and pick up of passengers by motorists adds to the assembly of cars and people at curbside locations.

Litter

In addition to increased pedestrian and vehicular congestion, littering is also problematic—especially when some companies have as many as 200 departures a day (New York City 18). To combat littering, some bus companies provide trash bags, tied to nearby buildings or fences, for passengers (New York City). It is not clear whether this reduces littering. Another problem voiced in the New York City study and others is bus passengers' use of nearby business facilities (e.g., restrooms in restaurants). Overuse and crowding of establishments may deter regular customers from patronizing businesses. Food truck vendors have also been known to capitalize on the curbside intercity bus industry by locating near pick-up/drop-off locations, where they may compete with local restaurants.

Unmarked/Changing Arrival and Departure Locations

Often curbside loading areas are poorly marked, unmarked, or lack signage. The New York City Chinatown Bus Study indicates that it is not possible for each bus company utilizing curb space to be granted signage (15). While repeat customers may be familiar with where to line up to wait for bus arrival and departures, others may be unfamiliar with specific pick-up and drop-off locations if they are not clearly marked.

Curbside operators may also change pick-ups and drop-offs locations. For example, in August 2012, all Megabus departures in New York City were moved to 34th Street between 11th Avenue and 12th Avenue, across from the Javits Convention Center and three blocks west of Penn Station. All arrivals continued to be at the corner of 7th Avenue and 28th Street. The change in departure location was made in cooperation with municipal officials, and in anticipation of accessibility to the future opening of a new subway station and planned development project. However, the current location is

isolated, lacks connection to public transit, is inconvenient to shelter and other amenities, and apart from major activity areas. One blogger, who commented on the change in departure location said, "Speaking as a native New Yorker, those avenues are pretty sketchy at night, despite a few luxury buildings in the area...it's also at least a 15-minute, fast-paced walk from any main subway stop or bus stop in Manhattan..." (yelp.com).

Safety and Security

On-street (or curbside) bus stops are located within public street rights-of-way. Often several entities share responsibility for the design, repair, maintenance, or capital improvement of a public right-of-way. Safety and security of local residents, pedestrians, and bus patrons is the concern of state DOTs, metropolitan planning organizations, local governments, public transit agencies, and private bus companies that use curbside locations. Therefore, it makes sense to cooperatively assess the need to plan for new, or upgrade, existing curbside locations; consider investments for multi-modal facilities that meet the needs of all stakeholders; and develop a framework to ensure high levels of safety and security.

DHS, ABA, and FTA have each issued suggested protection measures, security tips, and/or guidelines that focus on safety and security of bus facilities, drivers, and equipment. Most "best practices" for safe and secure facilities are geared towards public mass-transit and passenger-rail systems that utilize transit stations, not curbside locations. It is unclear whether on-site protective measures for facilities (e.g., video surveillance systems, controlled access points, routine sweeps of common areas, passive vehicle barriers, enhanced lighting) can be practically implemented at curbside arrival and departure points that are located within a public right-of-way rather than a transit station/facility.

Access

A recent report by the American Public Transportation Association (APTA) states that the design of on-street transit stops can foster and support access to transit. Perhaps because curbside intercity bus locations are transient, and are not regarded as permanent "transit stops"—but more likely because the business model shuns the use of and investments in facilities to reduce overhead costs and keep prices low—access to curbside locations seems to be of minor concern.

In fact, most curbside intercity bus stop locations seem to ignore what are regarded as ideal design principles for on-street transit stops (APTA 2):

- Connectivity to/from other modes of transportation—including pedestrian access
- Universal design to accommodate people of all ages and abilities
- Safety to minimize risks of accidents or criminal victimization
- **Comfort** to provide passengers a place to sit while waiting and protect them from extreme weather conditions
- **Legibility** to allow passengers to identify a transit stop and locate other modes of connecting transportation
- Quality to ensure that the public space is designed and maintained appropriately

While the guidelines are directed toward public transit agencies, and financing and/or cost-sharing strategies are not addressed, these principles should be applied to curbside arrival and departure points for curbside intercity buses. As noted in the APTA report, the "fundamental goal in the design of any transit stop must be a good passenger experience" (APTA).

Idling

Motorcoach idling is a major concern because it can waste up to a gallon of gas per hour and increase exposure to dangerous emissions (Engine Anti-Idling Law). Idling is a problem for curbside intercity buses that are not housed in a terminal. Buses often idle while customers load or unload, and deposit or retrieve their luggage. The length of idling is often determined by a number of factors. First, idle time may depend on available bus staffing. Often, buses idle as drivers assume additional roles as ticket takers, luggage attendants, and customer service representatives. Second, buses may idle when drivers take breaks, switch shifts, or change staffing. Third, temperature plays a factor in the length of time a bus idles. Buses idle to comply with passenger comfort laws—to provide optimal temperatures inside the coach during extreme hot or cold weather. Finally, buses may also idle to provide auxiliary power to prevent mechanical breakdowns that may occur when the engine is stopped.

Virtually all transportation modes emit pollutants, but motorcoach idling concentrates this pollution in curbside areas where people live, work, and breathe. A 2006 EPA report studied motorcoach idling in several major tourist areas in Washington, D.C. (Motorcoach Idling 5). Enforcement issues were of major concern among the various responsible agencies. Education and new technologies were cited as important tactics to help reduce engine idling (Motorcoach Idling 42).

Many state and local governments have adopted idling laws to minimize adverse environmental and health impacts. A summary of idling laws of entities in the Northeast Corridor can be found in Appendix A. Because laws vary, motorcoach companies that operate on an interstate basis may not be aware of different legal requirements that are specific to each jurisdiction.

Enforcement of these laws may also be difficult. Unless a regulator is purposefully monitoring operations, or a complaint is reported, it may be questionable as to whether the maximum idling-time allowance has been exceeded. Moreover, enforcement authority may be unclear. Depending on the jurisdiction, enforcement may be delegated to municipal code enforcement officials, a public safety department, a department of transportation, and/or a state environmental protection agency. For example, the New York Police Department issues idling citations in New York City (New York City 19).

Fung Wah Transportation Company received upwards of \$11,000 in idling fines in Boston, which contributed to the Massachusetts Bay Transportation Authority's decision to have all intercity buses depart from the South Station terminal (Steve Bailey, "Peter Pan is a Bully"). Again, enforcement of idling laws is key. Inability of bus operators to have a layover at a terminal or sheltered waiting area, adverse weather conditions, and need to keep buses running during changeover periods may prevent curbside buses from abiding by these rules.

6. Field Observations and Survey of Passengers

6.1 Field Observations

The Institute for Public Administration (IPA) research team conducted field observations to observe on-site conditions for several curbside arrival and departure points, as well as conditions while traveling on various bus lines. During the course of this project, the IPA research team conducted thirteen site visits within the I-95 corridor between New York City and Washington, D.C. These site visits included curbside arrivals and departure locations in Wilmington, Del., Cherry Hill, N.J., New York City, Philadelphia, Pa., Baltimore, Md., and Washington, D.C. The IPA research team was also able to observe onboard conditions on BoltBus, Megabus, Double Happyness Travel, Inc. and DC2NY during fieldwork. (See Appendix B for site visit reports).

Throughout the site visits, the IPA research team identified several common operating conditions and issues. Ten operating conditions of concern were identified: curb crowding, intermodal connectivity, availability of parking, bus idling, signage, passenger amenities, street congestion, shared space with city buses, and the presence of employees. Not all bus carriers were necessarily deficient or exemplary in each of these observation areas; rather how each carrier manages operating conditions can vastly affect the quality of service provided. Other conditions that were observed, but not photographed, are also discussed.

Curb Crowding – Boarding, exiting, and queuing of passengers at curbside locations contributed to congestion on sidewalks. In areas with high-pedestrian traffic, passenger crowding blocked the flow of walking traffic.







Intermodal Connectivity – The extent to which each curbside arrival and departure location (or bus loading area) was connected to other transportation modes varied greatly. For example, curbside arrival and departure locations in Philadelphia, Pa. were in close proximity to the 30th Street Station, which serves as the hub of SEPTA's commuter rail and bus service and also regional and high-speed Amtrak rail service. Washington, D.C.'s Union Station serves as an intermodal transportation hub with connectivity to passenger rail

(Amtrak), commuter rail (Washington Metropolitan Area Transit Authority [WMATA] Metrorail and Maryland Transit Authority MARC commuter rail), ground transportation (taxis, rental cars, and shuttles), and buses (WMATA Metrobus and intercity buses).

Availability of Parking – Whether curbside bus passengers had access to parking can contribute to traffic congestion. In general, many of the stops did not include parking for passengers, but used existing public and private parking lots in close proximity. For example, the White Marsh Mall stop in Baltimore, Md. has passenger



parking located in the mall's public parking lot. D.C.'s Union Station, has paid parking available.

Bus Idling — Often, buses continued to idle while waiting for passengers in a bus loading area. This varied from carrier to carrier, depending on the location. It should be noted that anti-idling laws exist in many states where intercity buses operate, but laws are not enforced. For example, while Pennsylvania state laws prohibit idling of trucks and buses for more than five minutes, a bus was observed exceeding the idling time in Philadelphia.



Signage – The presence of signage that designates a curbside bus loading area varied. Many curbside-loading locations had little or no signage, but there were a few sites with ample signage. For example, the Megabus stop near the Port Authority of New York and New Jersey (41st Street between 8th and 9th Avenue) had municipal signage to denote the curbside bus stop location. This location also included temporary signage to instruct passengers where to wait for certain routes (i.e., New York City to Albany vs. New York City to Philadelphia).

Street Congestion – Conditions where parked curbside buses often caused traffic congestion. For example, at the curbside bus loading area near 30th Street Station in Philadelphia, Pa., buses were observed circling several times until street

congestion cleared for buses to park. Parked cars, motorists dropping off passengers, intercity buses slowing down to pull into a curbside space, buses competing for the use of public space, and intercity buses using road lanes or shoulders for layover purposes, all exacerbated issues of congestion.

In most cases, large metropolitan areas like New York City do not have streets designed with bus turnouts (also known as pull-offs, pull-outs, and bus bays). Curbside/shoulder stops are intended for public transit buses that have short pick-up



and drop-off times. While bus turnouts may decrease the disruption of traffic along main road and improve passenger safety during boarding and deboarding, several conditions may make retrofitting unfeasible. First, a bus turnout can alter a right-of-way and adversely impact sidewalk pedestrian movements. Second, once a bus pulls into a pull-off area, traffic volume may prevent the bus from easily accelerating into a traffic lane.

Shared Space with Public Transit Buses – Often, local public transit buses competed with curbside intercity buses for space. Many curbside-bus loading areas were also the location of city transit system stops. This was readily apparent at curbside bus location in New York City near Penn Station. In Wilmington, Del., the former Double Happyness Chinatown buses parked in the same area as the designated bus stop for several First State DART routes (4th Street and Market Street).

Presence of Employees – Curbside bus company employees assumed various roles assisting passengers. The number of employees available to answer questions and to assist passengers with loading luggage varied by bus company and location. For example, the Megabus stop near the Port of Authority of New York and New Jersey had several staff on hand to direct passengers. In general, corporate carriers had staff at each urban bus location to answer questions and load luggage. In other locations, like



the White Marsh Mall stop near Baltimore, Md., there were no staff except the bus driver, who disembarked to take tickets and load luggage of waiting passengers. A language barrier was observed with passengers trying to communicate with the Double Happyness bus driver and storefront employees responsible for loading luggage onto the bus.

Safety features – Corporate curbside intercity buses were more likely to provide seat belts, pre-trip safety videos, and employees wearing reflective vests to manage loading and unloading activities. BoltBus features Southwest Airlines-style boarding groups to

eliminate crowd crush upon boarding.

Amenities – Corporate carriers featured onboard passenger amenities like Wi-Fi, restrooms, and reclining seats with ample legroom. However, most curbside arrival/departure areas lacked basic amenities such as shelters, secured waiting areas, bathrooms, lighting, benches, trash receptacles, and concessions. Often vendors locate

nearby or cater directly to waiting

passengers.

Littering – Littering tended to be problematic at curbside areas that lacked public trash receptacles, storefront locations, or intermodal bus facilities. The most problematic areas were park-and-ride or parking-lot locations near malls or residential shopping centers. For example, the Cherry Hill, N.J. arrival/departure point near an adjacent commercial shopping mall was strewn with litter and lacked trash containers.





Other conditions observed and documented, but not photographed:

ADA Compliance – Older Chinatown buses did not appear to offer accessible features (e.g., low-floor buses or buses with boarding ramps for people who use mobility devices). A Double Happyness bus was equipped with a wheelchair harness that was held together with duct tape. Each bus trip with a corporate carrier utilized new buses equipped with kneeling capability and seats that folded down to accommodate a wheelchair. However, no passengers were observed using these

features. Corporate carrier websites made pledges online to provide accessible transportation service to customers with special requirements. Priority boarding is provided to special-needs passengers.

Curbside conditions and management – It is unclear if a bus company, a municipality, transportation authority, or intermodal facility is responsible for managing curbside conditions and loading areas. Observations of curbside management included roped areas to form boarding queues by destination city; lack of enforcement of a bus parking in front of a fire hydrant; and no attempts made to clear cars blocking bus arrival/departure points.

Security measures – There were no observations made of airport-style screening (e.g., metal detectors or X-rays) of passengers or their baggage prior to boarding. No video security cameras were overtly present at curbside locations. In addition, perhaps because ticket purchases were made online, there was no verification of passenger information. Passengers boarding simply presented the driver with a printed copy of the e-mail reservation confirmation.

6.2 Purpose of Survey

As part of IPA's research on the curbside intercity bus industry, survey research was conducted of curbside intercity passengers within the study area. Using industry-standard Qualtrics software, IPA staff designed and generated an online survey to gauge customer motivation for using the intercity buses and to also collect demographic data.

Survey Design/Methodology

The UD Intercity Bus Customer Survey instrument was designed to survey passengers boarding and disembarking intercity buses (e.g., BoltBus, Megabus) on various times/dates and from various destinations between New York City and Washington, D.C. The survey was designed to ensure that subjects voluntarily taking the survey would remain anonymous and that no personal information would be disclosed. The survey consisted of 47 questions that were presented in a variety of formats, including multiple-choice open-ended questions that allowed free-form responses, and Likert scale (i.e., factors ranging from "not important at all" to "very important"). For a complete listing of survey questions, please see Appendix C. Survey questions were categorized within the following topics.

Informed-Consent Statement – This statement described the purpose of research, reason for survey, nature of voluntary participation, and assurance that the research would pose no risks to survey respondents.

Bus Trip Information – This series of questions focused on the purpose of the trip, trip route information, frequency and experience traveling by intercity bus, whether the subject or traveling companion(s) had a disability that was adequately addressed, factors affecting the choice of a bus company, mode of access to transit departure or destination points, method of ticket purchase, ease of obtaining information online, and desire for other curbside intercity bus travel locations.

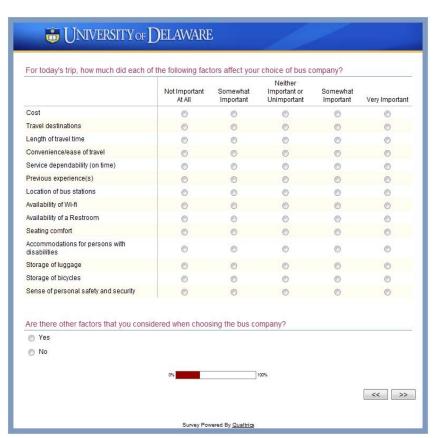


Figure 10: Screen Shot of UD Qualtrics Survey Page

Personal Data – Socio-demographic information was sought to provide a basis for analysis and cross tabulation of data. The Qualtrics survey tool was used to build and host the online survey. After receiving a web address for the survey, IPA was able to procure a simple URL re-direct from the University of Delaware's Office of Information Technology (www.udel.edu/bus-survey). Aside from being easier to type in than the original URL, this web address also provided the survey with a certain level of "legitimacy" to assure respondents that the survey was not a scam. Considering the

availability of Wi-Fi Internet access on some intercity bus carriers, the goal was for survey respondents to take the survey while in transit.

Trip Satisfaction – A series of Likert scale questions sought to obtain opinions regarding respondents' satisfaction with the value of the trip for money; overall trip experience including on-time performance, driver performance, and smoothness of ride; travel conditions; and on-board amenities.

Survey Administration

To administer the survey, a postcard was designed and given to curbside intercity bus customers to inform them and request participation in the survey. This postcard provided information on the survey's intent, IPA's research of the intercity bus industry, and directions for accessing the online survey. Aside from the re-direct URL, the postcard also included a Quick Response code (QR code). A QR code is an image, similar to a bar code, which can be read by smart phone applications. After reading the QR code with a smart phone, users are directed to the information contained within the code (i.e., a web address). In this instance, the QR code directed users to the Intercity Bus Customer Survey. The Qualtrics platform is mobile friendly, and respondents had the ability to take the survey from a smartphone. Because most intercity buses have available, onboard Wi-Fi, it was hoped that passengers would take the survey on either a smartphone or laptop computer while traveling.



Please tell us about your travel experiences on this bus! Take our voluntary, online survey at: www.udel.edu/bus-survey



Take our survey on your smart phone, using the QR code!

Figure 11: IPA Bus Survey postcard with QR Code

Intercity bus customers were informed of the survey by IPA researchers. The survey postcards were handed out during site visits conducted by IPA and also during a trip to Philadelphia's 30th Street Station specifically to hand out the survey post cards.

Through these means of distribution, survey participation was solicited to passengers originating/terminating travel in Philadelphia, Pa., New York City, Washington, D.C., Wilmington, Del., and Baltimore, Md. The solicited passengers were on carriers involved in the site visits, including BoltBus, Megabus, DC2NY, and Double Happyness.

Data Collection and Analysis

The Qualtrics survey protocol was designed to enable the IPA research team to:

- Gather statistical information on each survey question;
- View response counts and percentages for each question;
- Filter data to analyze response by categorical or demographic information; and
- Cross-tabulate data to analyze the relationship among multiple variables.

Issue of Response Rate

Despite the best efforts of the IPA research team, the Intercity Bus Customer Survey had an extremely low response rate. While nearly 300 survey cards distributed, only 16 responses were obtained. While speculative, the low response rate may be attributed to a number of reasons—including the method of distribution (postcards that linked to the online survey), lack of access to Wi-Fi, customer apathy, and length of time to complete the online survey. Possibly because of the time commitment involved, the survey also experienced attrition where respondents started but did not complete the survey. Specifically, 16 customers responded to the survey, but only nine completed the survey. Notwithstanding the low response rate and respondent attrition, the Intercity Bus Customer Survey did provide some insights as to individuals' perceptions of the industry and the carrier(s) being used.

Survey Outcomes

There were several responses to the Intercity Bus Customer Survey that were concurrent with trends observed in other research materials, observations during site visits, and during conversations with various intercity-bus-industry stakeholders. The list below provides a few of the key findings from the Intercity Bus Customer Survey.

- 69 percent of respondents (9/13) traveled by intercity bus at least once a month
- 44 percent of respondents (4/9) were planning to use public transportation to reach their final destination after departure from the intercity bus
- 100 percent of respondents (9/9) purchased their ticket online

- Six out of nine (6/9) respondents rated "Safety and security" and "A staff member available to answer my questions" as important factors in choosing their intercity bus company
- Seven out of nine (7/9) respondents rated "Convenient drop off location" as an important factor in choosing their intercity bus company
- Six out of eight (6/8) respondents indicated that they were "Very Satisfied" with the value of trip for the money spent
- 100 percent of respondents (9/9) indicated that they would continue to travel by intercity bus, based upon their experience during that day's travel

Importance of Survey Data

Aside from IPA's survey initiative, there have been several surveys conducted to gauge the motivations and preferences of curbside intercity bus passengers. The Chaddick Institute's research on intercity bus service has relied heavily on data gained from passenger surveys. Drexel's LeBow College of Business consulting project report for BoltBus also incorporated passenger survey data. Also, carriers such as BoltBus, Megabus, and Greyhound have all conducted customer surveys to gauge customer satisfaction and customer preferences. Although the survey data were not readily available to the public, they could be used as an extremely valuable tool for transportation planning at the local and regional level. For example, data indicating customer preferences for a particular departure/arrival location for buses could help cities to plan and prepare adjacent facilities to manage the influx of curbside bus passengers to this area. In another example, data showing that customers prefer curbside buses to be located near other transit facilities may inform budgetary and operational planning for the adjacent facility to handle the influx of curbside bus passengers.

Creating a data sharing agreement between curbside intercity carriers and municipalities would be mutually beneficial. Local transportation planning entities would gain greater insight into intercity bus passenger traffic, which would better inform relevant transportation planning initiatives, local policies to manage impacts of bus operations on vehicular and pedestrian traffic, need for safety and security measures, and capital planning for transportation infrastructure improvements. This would have the potential to benefit curbside bus carriers to address staffing, operations, and infrastructure needs at arrival/departure locations. Understandably, there are some data points that intercity bus carriers may be unwilling to share due to the competitive marketplace for intercity travel. Intercity bus companies and local transportation authorities should begin a dialogue to determine if these data could be shared and how they can better inform transportation planning and policy.

7. Case Study — Double Happyness, Inc.

This case study documents the curbside intercity bus company Double Happyness Travel, Inc., which evaded federal regulations. This case study also seeks to highlight why evading federal regulations is an issue of concern and the subject of federal inquiry and rulemaking. Information used was gleaned from government entities, legal documents, newspaper articles and editorials, primary sources, Google Maps, as well as various websites related to Double Happyness Travel, Inc., and its interaction with authorities. The Institute for Public Administration (IPA) sought to develop a case study on Double Happyness because its Wilmington storefront operations were in close proximity to the University of Delaware campus in Newark, Del. Initial field observations were also conducted by IPA's research team, who traveled on the bus line about a week prior to the first shutdown order. The case study also highlights the present challenges and inter-jurisdictional issues faced by federal, state, and local officials.



Figure 12: Photo of Double Happyness, Inc.'s Former Wilmington Storefront

A timeline in Appendix D summarizes events—as documented by the Wilmington, Del. newspaper *The News Journal*, as well as other sources—which transpired following the initial FMCSA "Operations Out-of-Service" order issued to Double Happyness on December 23, 2011.

Table 4: Snapshot-Double Happyness Travel, Inc

Double Happyness Travel, Inc.

- Licensed in Huntingdon Valley, Pa., the address printed on buses
- However, FMCSA listed the business address as 1023 Arch St. Philadelphia, Pa.
- Served Wilmington, Del., Baltimore, Md., New York City, Albany, N.Y., and other cities within the Northeast Corridor
- Lunbing Chen was listed as president and owner of the company
- According to the "Company Profile," found by searching the USDOT number on FMCSA's website, Double Happyness Travel, Inc. employed 21 drivers, and utilized 19 buses (FMCSA). This profile, which was accessed on June 25, 2012, again lists the Philadelphia Arch Street address as of June 24, 2012.
- · Advertised website as www.AAbus.com
- Periodically used Gotobus.com as a broker

7.1 Inconsistent Business Address Information

In order to operate a business, owners must navigate a wide range of local, state and federal rules. There are several levels of licensing. First, employers with employees, as well as businesses partnerships, and corporations must secure federal and state tax registration. Second, businesses operating in Delaware must obtain a Delaware business license from the Delaware Division of Revenue, register with the federal government, and, depending on location (e.g., City of Wilmington), must obtain a city and/or county business license. Third, a building permit may be required by a local jurisdiction if the physical location of the business requires construction of structures, change of building use, and/or zoning re-classification. Depending on the type of business, other types of licenses may also be required by a local government. Companies that operate commercial motor vehicles that transport passengers or haul cargo across state lines must be registered with the USDOT and display an "Interstate USDOT Number" on their vehicles. In addition, bus companies that transport passengers across state lines must apply for an Interstate Motor Carrier Operating Authority, which issues a business license from the USDOT to regulate insurance for the protection of motorcoach passengers.

For each of these licensing levels, an owner must provide some information about the business itself—including addresses. However, because various levels of government administer each of these business rules separately, the business license addresses may not match up and may be difficult to verify.

Corporate Address – Double Happyness, Inc. was licensed to operate under an address in Huntingdon Valley, Pa., which was printed on buses.

USDOT Registration Address – Double Happyness, Inc. registered with USDOT using a Philadelphia, Pa. address.

Multiple Business License Addresses — Double Happyness, Inc. also operated out of a storefront located at 3 Fourth Street in Wilmington, Del., which required both a state of Delaware and City of Wilmington business license (City of Wilmington business license form). It is assumed that the company also had additional business licenses for other states/jurisdictions where physical operations took place.

Various Insurance Policies — Under Interstate Motor Carrier Operating Authority rules, applicants must file a legal point of contact for all to receive and process legal papers at a company's "official address of record." During its seven years of operation, Double Happyness, Inc. secured 32 insurance policies that contained inconsistent information on the "official address of record." In addition, this document listed four involuntary revocations of the company's operating authority since the company's initial registration (licenses report).

Federal Motor Carrier Safety Administration (FMCSA) Shutdown Order

Address – On December 23, 2011, a federal program specialist for FMCSA's Pennsylvania Division issued an "Operations Out-of-Service" order to Double Happyness Travel, Inc. The shutdown order noted that it was hand-delivered to Double Happyness President Lunbing Chen (also written as Lun Bing Chen) at China Bowl Restaurant located at 906 Henrietta Avenue, Huntingdon Valley, Pa. (Imminent Hazard Order 12).

7.2 History of Repeat Violations

FMCSA's goal is to identify and remove unsafe operators from the highways. However, there is no examination or experience required under the Interstate Motor Carrier Operating Authority. Moreover, fitness of a carrier is no longer regulated due to the Interstate Commerce Commission Termination Act of 1995, which deregulated the trucking industry on January 1st, 1996. However, when a new carrier is issued a USDOT number, it is automatically enrolled in the USDOT's New Entrant Safety Assurance Program. This program requires new entrants to pass a safety audit within 90 days and maintain acceptable roadside safety performance over an initial 18-month probationary period before they are given permanent registration status.

Once permanently registered, FMCSA monitors motor carriers monthly with a comprehensive system using information collected from companies and from inspections. FMCSA's Compliance, Safety, Accountability (CSA) program has established a Safety Measurement System (SMS) to provide a higher focus on high-risk

companies to apply the appropriate safety interventions or removal actions. SMS applies scores in seven areas called Behavior Analysis and Safety Improvement Categories (BASICs): Unsafe Driving, Fatigued Driving (hours-of-service), Driver fitness, controlled substances, vehicle maintenance, issues concerning cargo, and crashes. These data are evaluated monthly and reported as percentages from 0 to 100, where 100 is the worst rating (SMS Methodology 2-5).

The compliance review and roadside inspection are important parts of the monitoring system of FMCSA. The combined results are converted to a rating of satisfactory, conditional, or unsatisfactory. Yet, federal law prohibits en-route inspections of motorcoach buses that are transporting passengers. New entrants receive a thorough on-site examination as well as those who are prioritized for intervention by high SMS scores, such as these listed below for Double Happyness in December of 2011. The compliance review takes place when carriers have high and/or rising SMS scores, fatal crashes, serious complaints or other signs of pervasive problems. Companies can also receive warning letters, roadside inspections, or on-site and offsite inspections depending on the severity. These new measures help prioritize interventions and focus FMCSA's limited resources on companies with serious deficiencies. While fewer than two percent of companies are subject to a compliance review each year, Double Happyness had been subject to five compliance reviews in the past two years (Carrier Summary, 2012).

Table 5: FMCSA Compliance Review of Double Happyness, Inc. (Imminent Hazard Report, 4)

Category	Score
Unsafe Driving	92.8%
Fatigued Driving (Hours-of-service)	92.6%
Driver Fitness	95.0%

The December 2011 review of Double Happyness, Inc.'s operations found "[FMCSA regulation] violations so widespread as to demonstrate a continuing and flagrant disregard for compliance [...] and a management philosophy indifferent to motor carrier safety" and granted the company an "Unsatisfactory" safety fitness rating (Imminent Hazard Order 5, 11).

Based on the rating, the order stated that the company "[e]ffective immediately [...] must cease all commercial motor vehicle operations, including all interstate or intrastate transportation of passengers by drivers from all dispatching locations or terminals" (Imminent Hazard Order 2).

This order removed the company's ability to operate specifically based on (Imminent Hazard Order 4):

- 1. Violations of five separate hours-of-service regulations including making 49 false reports of driver duty activities
- 2. Violations of five separate vehicle inspection and maintenance regulations
- 3. Violations of four separate controlled substances and alcohol use and testing regulations including using two drivers before having received a negative preemployment controlled-substance test result
- 4. Violations of seven separate commercial driver's license and driver qualification regulations including failing to maintain inquiries into its drivers' driving records
- 5. Company's past history of violations as demonstrated by the frequent inspections, and out-of-service orders

7.3 Enforcement Difficulties

Cease and Desist Order Issued by FMCSA

The federal shutdown order stated that Double Happyness, Inc. must immediately cease operations. The order extended to the company's "officers, directors, managers, successors, assigns and closely affiliated companies." It also stated that the corporation could not continue operations utilizing other vehicles or services, or another name or company (Imminent Hazard Order 3, 8). However, Double Happyness, Inc. continued to operate for more than a month after the initial order so FMCSA issued a cease and desist order on January 4, 2012.

FMCSA acknowledged that Double Happyness had continued to "unlawfully [sell] tickets for interstate transportation of passengers under operating authority registrations of other motor carriers" (Cease and Desist 2-3). The order stated that failure to comply would result in action from the U.S. District Court (Cease and Desist 3).

The cease and desist order specifically stated that Double Happyness could not operate through brokers or ticket sellers, or through anyone else using another name. In fact, Double Happyness had been observed contracting with companies such as Rockledge, Grand Harmonious Tour, and still sold tickets through GotoBus.com. This website allows users to search for routes and tours for primarily Chinatown buses and was touted by the Washington Post in 2007 as the best site for booking online travel in the motorcoach category (though the author called it a bit "squirrelly") (Carol Sottili Washington Post 2007).

Restraining Order Issued by USDOT

Because the company continued to run buses, USDOT issued a temporary restraining order on January 26, 2012. This order restricted Double Happyness from operating any vehicles, "contracting or arranging" operation, "contracting or arranging with other motor carriers unless the motor carrier(s) possesses valid and active operating authority registration from FMCSA," and from seeking a new USDOT number or operating authority (Temporary Restraining Order 2).

The order clearly states that Double Happyness cannot operate, but can do business with another carrier as long as they are properly registered. This instruction seems to contradict the original out-of-service order, which prohibited operations by or with "closely related affiliates" (Imminent Hazard Order 3). With the ease of ticket sales online and customers who ask few questions, both orders beg the question of enforcement. While both FMCSA and U.S. District Court issued these documents, enforcement authority was unclear.

Double Happyness Resumes Operations as New Everyday Bus

The Wilmington, Del. newspaper *The News Journal* reported that the buses were still running after the restraining order, and that a new operator, New Everyday Bus, had taken over. Interestingly, New Everyday Bus already shared the same Wilmington business address as Double Happyness, Inc., and a probable family affiliation. Based on a search of newspaper articles, New Everyday Bus owner Lun Dong Chen is presumed to be the brother of Double Happyness, Inc. owner Lun Bing Chen.

Double Happyness Travel, Inc. had provided routes from Wilmington, Del. to New York City since about 2004, with service to Smyrna and Dover, Del. (Nathans, Rogue Bus, FMCSA News Release, 27 Dec 2011). As seen in Figure 13, signage at the 133 East Broadway, New York City storefront suggested that Double Happyness and New Everyday Bus Tour, Inc. are "closely affiliated companies"—which is a violation of the original FMCSA cease and desist order.



Figure 13: NYC Storefront Signage Suggests "close affiliation" between Double Happyness, Inc. and New Everyday Bus Tour, Inc. (Chin)

City of Wilmington Shuts Down Bus Operations

In late January 2012, the City of Wilmington Department of Licenses and Inspections shut down Double Happyness because it did not follow the proper procedure for licensing its new name following the federal shutdown order (Nathans, Rogue Bus Company Closed). New Everyday Bus's owner, Lun Dong Chen, tried to register the new company under two new names that proposed operations run out of the same location. Another person, Chun Jin Zhuo, proposed a new company to be run from 403 N. Market Street, the location of a nearby Chinese restaurant. All requests were denied by the City of Wilmington (Nathans, Rogue Bus Company Closed). Thus, while the federal shutdown order was ignored and Double Happyness continued operations under the guise of New Everyday Bus Tour, the City of Wilmington was able to stop operations by denying business license requests.

New Everyday Bus Tour, Inc. Secures Wilmington Business License

In June 2012, the City of Wilmington issued a business license for New Everyday Bus Tour, Inc. to operate out of the same location as the former Double Happyness bus company (Nathans, City Permits). Again, while the original FMCSA out-of-service order stated that "closely affiliated companies" could not substitute for the carrier or continue service, ultimately New Everyday Bus Tour did assume operations for Double Happyness (Imminent Hazard Order 3).

The City of Wilmington's Deputy Chief of Staff John Rago indicated that the city contacted, but received no response from FMCSA about the applicability of the federal shutdown orders to New Everyday Bus Tour, Inc. According to *The News Journal*, Rago stated that "New Everyday's attorney contacted the city, and without evidence that New Everyday was covered by the shutdown order, we did not have a basis to continue to deny New Everyday a business license" (Nathans, City Permits).

The News Journal contacted FMCSA asking whether they have allowed the new company to run Double Happyness's operations and "spokeswoman Shashunga Clayton wrote in an email that the agency 'has not authorized Double Happyness to resume operations' and that it is monitoring Double Happyness' activities" (Nathans, City Permits).

7.4 Use of Ticket Brokers to Evade Federal Rules

GotoBus.com, TakeTours.com, and 2001bus.com are online ticket sales and search engine services for Chinatown bus travel owned and operated by Ivy Media Corporation. According to its founder Jimmy Chen, these brokerage services operate like a third-party travel company, similar to Expedia, Inc. Expedia is an Internet-based website that contracts with airlines and hotels to sell discounted rate travel services. However, unlike Internet-based travel websites or associations that represent safe motor carrier travel, Ivy Media-operated websites do not provide information about motorcoach companies' safety ratings, safety history, and insurance status.

For example, FMCSA canceled the operating authority of Sky Express bus company because the bus company had amassed one of the worst safety records in USDOT's database. Sky Express then was granted ten extra days by USDOT to appeal its poor safety rating. So while its operating authority was officially revoked, Ivy Media's online ticket brokers continued to sell bus tickets for travel on Sky Express. As a result, Sky Express crashed on I-95 in Richmond, Va.— killing four people and injuring over 50. FMCSA issued a shut down order after the fatal crash. However, just days after the accident, the company was caught evading the out-of-service order when it painted over the Sky Express names on buses and illegally sold tickets online. Regulators report that the company changed its name to 108 Bus, I-95 Coach, and used other guises to sell tickets through Ivy Media-operated brokerage sites (Times Dispatch.com).

While no longer operating as Double Happyness, Internet-based bus ticket brokering services appeared to have been selling bus tickets for travel to destinations along its former routes. Tickets sales for the former bus line have been brokered online through

AAbus.com, GotoBus.com, and GoBusBus.com, after the December 2011 Double Happyness bus shutdown.

As of September 2012, it appeared that a new ticket brokering service was also selling bus tickets for some former destinations of the former Double Happyness bus company (Sept. 2012). Xinnix Ticketing, Inc. was listed as the "operator" on routes out of Double Happyness's former Wilmington, Del. address to various locations. Xinnix was also operating a website with little contact information for bus routes and times. In Virginia, Xinnix Ticketing, Inc. applied for a permit to operate out of a storefront. Its application request described its business as a ticket operator only—that is, the company did not own buses, operate buses, or drive buses. The company merely sold tickets and served as a bus station. However, GotoBus.com listed Xinnix company as the operator. In Newport News, Va., Xinnix Ticketing, Inc. listed the same address, phone number and email address as New Everyday Bus Tours, Inc. Xinnix Ticketing, Inc., which also goes by Xinnix Bus, was listed on a separate website, and was basically a shell company by which to shield true operators for these bus routes. No company by the name Xinnix appeared to be registered with the USDOT. It appears that the ticket brokering service sold tickets for New Everyday Bus Tours, Inc. and perhaps its closely affiliated company—Double Happyness Travel, Inc. and as such was not subject to any sort of regulatory oversight.

7.5 "Closely Affiliated" Companies and Reincarnated Carriers

Without evidence that companies are indeed "closely affiliated," nor an agreed upon definition, or even authorization to prove these connections, some bus companies have been able to resume operations under the name of another person or company—in direct conflict with federal shutdown orders. New Everyday Bus lists its business address in Philadelphia.

While the Double Happyness, Inc. and New Everyday Bus Tours, Inc. have different carrier names, websites, and phone numbers, it can be assumed that both companies' operations are closely associated with one another and may have been able to interchange routes in the event of a federal shutdown order. This close operational alignment illustrates the FMCSA's difficulty in addressing reincarnated carriers—which can quickly change names following a safety violation and continue to operate under the guise of another motorcoach carrier name.

Proving that companies are "closely affiliated" is a complex task. FMCSA Federal Program Specialist Frank Ross stated in *The News Journal* that the fact that the two men (Lun Bing Chen and Lun Dong Chen) are brothers is not enough to claim a connection. An attorney who represented both companies stated that there are no

connections at all between the two companies (Nathans, Feds: Tough to prove). Independent investigation from data on the FMCSA's website lists both companies' violations and reveals at least two violations involving buses with the same license plates that were used by both companies (Carrier Summary, FMCSA). While none of these facts can conclusively prove connections between the two companies, these events demonstrate the difficulties in dealing with bus companies that offer little information to consumers and evade regulators by forming tight alignments with other officers, directors, managers, successors of other closely affiliated companies.

In May 2012, 26 Chinatown bus companies were found to be operating through three organizations and were subsequently shut down (FMCSA press release). FMCSA did not offer information as to how they ascertained connections, however.



Figure 14: While signage on a building may suggest a legitimate business, it may be the home of a chameleon bus company that has changed names to evade safety regulations.

7.6 Conclusion

This case highlights the need for additional federal enforcement authority; greater enforcement coordination among levels of government; federal standards to define what constitutes a reincarnated carrier; and disclosure of bus companies represented by ticket brokers. As demonstrated by the ongoing case of Double Happyness, it is not enough to require operators to follow laws to offer safe routes for consumers. Most consumers are unaware that motorcoach carriers must comply with safety regulations and that they should review a motorcoach company's safety record before booking a trip. While the American Bus Association (ABA) and FMCSA offer passenger safety

information and advice for prospective bus passengers, the average consumer may not be aware of this information.

Several breakdowns allowed Double Happyness Travel, Inc. to continue bus operations despite a poor record of safety, a federal shutdown order, and flagrant disregard for compliance. First, FMCSA's compliance review of Double Happyness Travel, Inc. on December 22, 2011 determined that Double Happyness was an "imminent hazard," and an order was immediately issued to shut down operations. However, it was not the first compliance review that revealed poor safety practices. Double Happyness received five compliance reviews over a short two-year period; these compliance reviews revealed a clear pattern of violations, need for frequent inspections, and the issuance of several out-of-service orders.

Second, there seemed to be a regulatory disconnect once the cease and desist Order was issued by FMCSA. The order stated that lack of compliance would result in action from the U.S. District Court. Yet, when Double Happyness continued to operate illegally, the only action taken by FMCSA and the U.S. District Court was a temporary restraining order. Double Happyness blatantly ignored the inconsequential restraining order. Although FMCSA has established a comprehensive Safety Measurement System to monitor safety practices of motorcoach carriers, there seem be a lack of equally comprehensive system of follow-up enforcement measures to ensure compliance of federal and state regulations. Moreover, while FMCSA has successfully directed multi-agency motor-carrier safety strike-force operations, a similar multi-jurisdictional approach is needed to better coordinate those responsible for day-to-day safety of motorcoach passengers and strengthen routine motorcoach safety enforcement activities.

Third, while the cease and desist order specifically applied to companies "closely affiliated" with Double Happyness, this language seems to be problematic and difficult to enforce. Federal officials seemed to be hesitant to connect the dots between Double Happyness Travel, Inc. and New Everyday Bus Tours, Inc. Despite familial ties, alignment of bus routes, identical corporate addresses, same storefront locations, and buses being used by both companies with the same license plates—"close affiliation" was not evident to federal officials. At the time of the Double Happyness shut down, there was a lack of federal standards to guide in a determination as to whether a new carrier was a reincarnation of an old, unsafe carrier. Passage of the Moving Ahead for Progress in the 21st Century Act (Map-21) in July 2012, with numerous provisions to enhance commercial motor vehicle safety—particularly § 32103 pertaining to reincarnated carriers—may strengthen oversight and enforcement of illegally operating motor carriers. Moreover, lines of communication need to be opened between local, state, and federal agencies that are involved in granting operating

authority and business licenses to bus companies. Because FMCSA failed to respond to an inquiry from the City of Wilmington officials about the applicability of the federal shutdown orders to New Everyday Bus, the municipality had no grounds to reject the business license application request.

Finally, the cease and desist order also stated that Double Happyness could not operate through other brokers or ticket sellers. However, Double Happyness continued to operate by contracting with other tour companies and selling tickets online through GotoBus.com. In addition, there seems to be an ongoing relationship between Double Happyness, New Everyday Travel, and online ticket brokers such as GotoBus.com and Xinnix Ticketing, Inc. Unless there is a federal requirement for online ticket brokers to disclose the names of bus companies that they represent, consumers will be unable to determine whether they have purchased a ticket from an unsafe operator.

8. Federal Response to Industry-Related Issues, Including MAP-21

The United States Department of Transportation (USDOT) oversees several federal agencies, including the Federal Motor Carrier Safety Administration (FMCSA), and is responsible for highway, vehicle, and transit safety. As previously discussed, the Surface Transportation Board (STB) was established in 1996 and FMCSA in 2000 to assume some of the regulatory functions that had been administered previously by the Interstate Commerce Commission (ICC). The National Transportation Safety Board (NTSB), Federal Transit Administration (FTA), and U.S. Department of Justice (DOJ) also have roles to ensure safe operations of motorcoach operators and ensure civil rights of persons with disabilities that use transportation. Moreover, federal, state, and local governments share some degree of responsibility for motor carrier safety, bus accident investigation, safety audits, vehicle inspections, Americans with Disabilities Act of 1990 (ADA) compliance, law enforcement, and licensing of vehicles and commercial drivers. Effectiveness of policies and regulations are dependent on sufficient federal funding and multi-jurisdictional coordination.

Motorcoach safety advocates, such as NTSB, have requested regulatory action to improve safety for decades. NTSB findings and recommendations to improve motorcoach safety, occupant protection measures, and enforcement of regulations have been considered by federal agencies such as the National Highway Traffic Safety Administration (NHTSA) and FMCSA. However, recent high-profile motorcoach crashes have heightened public attention on the need to adopt a stricter regulatory environment to protect passengers; ensure the safety fitness of new drivers; improve vehicle integrity and maintenance; target enforcement against high-risk motor carriers; and increase public awareness and transparency of motor carrier safety performance. The following sections provide an overview of attempts to address motorcoach safety issues in a comprehensive manner. The July 2012 adoption of the two-year transportation reauthorization bill, Moving Ahead for Progress in the 21st Century (MAP-21)—particularly the Commercial Motor Vehicle Safety Act of 2012 establishes a strategic framework to improve the regulatory environment, provide a program of continuous improvement, and authorize greater rulemaking and enforcement authority of FMCSA.

8.1 National Transportation Safety Board Curbside Motorcoach Safety Recommendations

NTSB's October 2011 Report on Curbside Motorcoach Safety analyzed the current state of motorcoach carriers providing curbside service, described the safety records

of curbside carriers, and evaluated the adequacy of safety and oversight of the industry. The report emphasized that most motorcoach carriers—including curbside and conventional business models—generally provide a safe mode of travel. The report noted that while safety records vary, the small non-corporate curbside carriers have worse safety records (e.g., higher accident and death rates, out-of-service incidents, and safety violations.) The report provided some key recommendations to improve the safe operations of the curbside intercity bus industry, including the need to (NTSB, 2011) improve the FMCSA's Compliance, Safety, and Accountability (CSA) Program by:

- Providing complete reporting on motorcoach operating data;
- Eliminating the statutory exemption of en-route curbside carrier inspections;
- Conducting routine inspections to obtain adequate safety performance data;
- Ensure FMCSA follow-up on oversight of required motorcoach safety forms (e.g., MCS-150);
- Modifying FMCSA's voluntary safety reporting system to incorporate voluntary violation or safety reports, anonymous reporting of incidents, summary statistics, and methods for reporting safety concerns;
- Providing sufficient numbers of FMCSA and state personnel to conduct compliance reviews and motorcoach inspections;
- Granting FMCSA authority to regulate ticket brokers for motorcoach services;
- Approving rulemaking to provide oversight of leasing agreements among interstate motorcoach operations;
- Adopting stricter requirements for new entrants to obtain a DOT number and motor carrier number to conduct operations; limit issuance of multiple DOT numbers;
- Granting FMCSA authority to implement standardized criteria as to what constitutes a "corporate successor," to prevent reincarnated carriers from resuming operations;
- · Reviewing the amounts of monetary fines to serve as a deterrent; and
- Addressing the need to standardize state inspections, issuance of commercial driver licenses (CDLs), and English proficiency of drivers.

8.2 National Highway Traffic Safety Administration Occupant Crash Protection Rulemaking

Beginning in 2002, the NHTSA undertook a comprehensive review of motorcoach safety issues and possible actions to address them. This review resulted in the issuance of NHTSA's 2007 Motorcoach Safety Plan, which identified four areas to target regulatory action to enhance motor safety—1) passenger ejection, 2) roof strength, 3)

fire safety, and 4) emergency egress. NHTSA determined that seat belts in motorcoaches would be the most effective way to address passenger ejection in the advent of a crash and conducted an extensive test program on use of seat and lap belts (Office of Federal Register 2010).

As a follow-up to NHTSA's 2007 Motorcoach Safety Plan and DOT's 2009 Motorcoach Safety Action Plan, NHTSA issued a notice of proposed rulemaking. This rulemaking would amend the Federal Motor Vehicle Safety Standard (FMVSS) No. 208 "Occupant Crash Protection" to require the installation of passenger and driver lap/shoulder seat belts in new motorcoaches. However, requiring seat belts in older buses poses many challenges and burdens smaller companies financially (NHTSA, NPRM on Seat Belts). Other safety improvements being considered for new motorcoach vehicles/equipment include fire safety, emergency evacuation, and roof strengthening enhancements.

8.3 Surface Transportation Board Support for Competitive and Efficient Transportation

In addition to serving as an economic regulatory agency under the purview of Congress, the STB also acts as an adjudicatory body for rail and intercity passenger bus operational disputes. Under U.S. Code, Title 49: Transportation §14302 (Pooling and division of transportation or earnings), motor carriers (e.g., bus companies providing intercity transportation services) may not combine with another carrier to pool traffic, services, or any earnings without the approval of STB. Two conditions must be met in order for the Board to grant approval: 1) pooled operations will be in the interest of better service to the public or of economy of operation; and 2) pooled service will not unreasonably restrain competition (49 USC §14302).

In 1997, Peter Pan Bus Lines, Inc. and Greyhound Lines, Inc. filed applications with STB to pool their operations in the Northeast between New York City (NYC) and Philadelphia, NYC and Washington, D.C., NYC and Boston, and NYC and Springfield, Mass. STB approved the applications based on evidence that a pooling agreement between the two companies would bolster ridership, reduce excess bus capacity, minimize a duplication of resources, and enhance capital service improvements (Surface Transportation Board Decision, 2012).

The pooling agreement worked successfully until Peter Pan and Greyhound launched BoltBus in 2008 as a new curbside intercity bus service. Because Coach USA, Inc. offered Megabus as a competing curbside passenger service, it attempted to block BoltBus service within the Northeast Corridor. Coach USA, Inc. argued that the new curbside bus service altered the original pooling agreement and was subject to a new pooling authorization by STB (Surface Transportation Board Decision, 2012).

In an April 2011 decision, STB rejected Coach USA's petition to block BoltBus service. While STB agreed that new entrants had increased the competitive climate of the curbside intercity bus market, it rejected demands to tighten existing pooling authorizations. Coach USA again challenged the pooling agreement when BoltBus announced that it would further expand services and provide a new hub in Newark, N.J. in 2011 (Surface Transportation Board Decision, 2012).

A May 12, 2012 decision by STB found that the new, expanded services "do not present a competitive problem and are within the scope of our prior approval authorizing the Agreements" (Surface Transportation Board Decision, 2012 4). The Board recognized that the curbside intercity bus market has evolved to respond to market changes, new demands for service, and a new curbside business model instead of a traditional hub and spoke model. It concluded that new bus services offered by BoltBus were within the scope of the prior pooling arrangement. STB noted that "bus competition is flourishing," that new-service provision advances national transportation policy to "promote competitive and efficient transportation service," and that the public would not benefit by "placing regulatory barriers to innovation" (Surface Transportation Board Decision, 2012 5). The STB decision is significant because it recognizes that new curbside intercity bus services are responding to market demands and can prosper in a competitive business environment without anticompetitive harm.

8.4 Measures to Ensure ADA Compliance

Documentation of ADA Service Requests

To track ADA compliance, FMCSA requires that over-the-road bus (OTRB) companies document and report all ADA service requests annually, as well as record and report the number of times the request was "satisfied or equivalent service provided." Requirements for large, fixed-route companies differ from small; the company size is defined by gross annual revenue, where large operators' revenues exceed \$8.7 million and small operators do not exceed \$8.7 million (ADA Guidelines, FMCSA).

ADA Standards for Transportation Facilities

In 2006, the DOT adopted new standards, based on U.S. Access Board guidelines, to guide ADA compliance in transportation facilities. The standards apply to bus stops, bus and rail stations, and transportation facilities constructed or renovated after 2006, as well as mandate equivalent accommodation, accessible routes, and curb ramps. These measures are intended to improve accessibility for persons with disabilities while facilitating compliance (Title III).

The nature of the curbside bus industry presents a challenge in complying with these regulations. Unless a curbside stop is scheduled for new construction or renovation, the standards would not apply to a street corner constructed prior to 2006 where an intercity bus has established a departure point. Moreover, because intercity bus curbside stops often change, it is difficult to apply a consistent level of accessibility for these transient transportation facilities. Finally, there is a question of who is responsible for making a street-side bus-departure area ADA accessible. In many cases, there is confusion over which entity—public or private—is responsible, or shares responsibility for, installation or maintenance of an accessible facility.

Over-the-Road Bus Transportation Accessibility Act

In 2006, the FMCSA performed an inspection of curbside carriers and the *Washington Post* reported that eleven carriers were found to have committed ADA violations (Bill Brubaker). Consequently, in March 2006, a hearing in the U.S. House of Representatives discussed "Curbside Operators: Bus Safety and ADA Regulatory Compliance" before the Subcommittee on Highways, Transit and Pipelines, which is part of the Committee of Transportation and Infrastructure. As a result of this investigation, a law was proposed to ensure accessibility of all buses. It addressed issues of private, intercity bus companies without stations, or "curbside" carriers, that have failed to provide accessible buses and/or have a poor ADA compliance history (Brubaker).

The Over-the-Road Bus Transportation Accessibility Act of 2007, Public law 110-291, was signed into law on July 30, 2008. The law amends § 13902(1) (a), Registration of Motor Carriers, of Title 49 – Transportation, under the U.S. Code. The law applies to accessibility requirements, as established by the U.S. Secretary for Transportation, specifically to transportation provided by an OTRB carrier (H.R. 3985, govtrack.us). The law asserts that OTRB carriers cannot deny transportation to passengers with disabilities, require or request a passenger with a disability to reschedule a trip, or require individuals other than bus staff to assist with boarding a passenger with a disability. To comply with the law, accessible service must be provided given 48 hours advanced notice (H.R. 3985, govtrack.us). As previously stated, while the OTRB Transportation Accessibility program provided discretionary awards to assist with ADA compliance, it was repealed under MAP-21.

8.5 Environmental Protection Agency Clean Air Regulations

According to the Environmental Protection Agency (EPA), more than 11,000 older diesel engines, which include those in buses operated by the curbside industry, emit high levels of nitrous oxide, a key component of smog. New EPA grants announced in

2011 will provide money to help reduce the annual 7.3 million tons of nitrous oxide emitted by supporting clean diesel programs (EPA Awards). Proposed rules aim to reduce greenhouse gases (GHG) by improving fuel consumption in diesel vehicles beginning in 2014 as well (BUSride). Motorcoaches are not the only contributors, of course, to toxic emissions; since the Clean Air Act Amendments of 1990, vehicles such as motorcoaches have had to reduce emissions and use cleaner fuels (Cars, Trucks, EPA). While vehicles are polluting less than they did 40 years ago, more cars are driving on roads, which is one reason why pollution levels have not decreased significantly (Cars, Trucks, EPA).

8.6 FMCSA Motor Carrier Safety Initiatives

FMCSA is an agency within USDOT that serves to enforce safety measures first mandated in the Motor Carrier Safety Improvement Act of 1999 (FMCSA). In August 2011, Regional Roundtables were held across the country leading up to the National Motorcoach Safety Summit held in September 2011 in Washington, D.C. The conference held discussions among stakeholders in these topic areas: training and knowledge gaps, uniformity in enforcement, fatigue, and outreach and public awareness (Summit Summary).

FMCSA efforts to ensure that curbside intercity buses operate safely are focused on three core principles: 1) raising the bar for entering the industry, 2) holding motor carriers and drivers to the highest level of safety standards, and 3) removing all unsafe operators.

Raising the Bar for Entering the Industry

Commercial Driver Learner's Permits – Many of the recent fatal crashes with curbside buses involved distracted, inexperienced, or fatigued drivers. While motorcoaches are a safe means of travel overall, crashes average 19 deaths per year (Motorcoach Safety Action Plan). In May 2011, FMCSA established a new rule that dictates national standards for all commercial driver learner's permits (CLPs), and tests required in order for a driver to obtain a commercial driver's license (CDL) (FMCSA). This is similar to laws in many states that require new drivers to obtain a learner's permit and drive for a period of time under supervision of a licensed adult, in order to be eligible to obtain a full driver's license.

To obtain a CLP, a driver must be at least 18 years of age and complete a written test without the use of language interpreters. Provisions in the rule are also intended to prevent fraud. The rule requires a minimum 14-day waiting period between getting a learner's permit and taking the CDL driving test. After the waiting period is over, a

prospective CDL driver would need to provide his or her Social Security number, provide proof of U.S. residency, and take the entire test in English. In the past, federal regulations required commercial drivers to have knowledge of English, whereby states allowed drivers to use language interpreters for the written test. States must comply with the law, to meet these minimum federal standards, by July 2014.

New Entrant Safety Assurance Program – To address the need to impose stricter new entrant criteria and deter chameleon carriers, FMCSA established regulations that require each new motor-carrier owner and operator to undergo a safety review within 18 months of starting operations. To carry out this regulation, FMCSA established new entrant safety assurance requirements effective February 17, 2009 in order to ensure compliance with basic safety management controls. The New Entrant Safety Assurance Program is designed to improve FMCSA's ability to identify at-risk new-entrant motor carriers and ensure that insufficiencies are corrected before permanent registration is awarded. The program also ensures that applicants are informed about federal safety regulations, including ADA compliance, before engaging in interstate operations. The final rule gives FMCSA the authority to take action against motor carriers found to have egregious safety violations during the stricter safety audit and the power to take action against chameleon carriers that misrepresent themselves or attempt to skirt new entrant criteria (Federal Register 2008). Twentyfour percent of new entrants' applications were rejected in 2012 for attempts at reincarnation of out-of-service carriers or failure to disclose information (Motorcoach Action Plan update 2012).

Written Proficiency Examination – This will establish the creation of a written proficiency test, required for motor carrier applicants, to test knowledge of federal government safety regulations, standards, and orders (49 USC § 13902).

Registration Requirements – FMCSA has cracked down on the reincarnation of shuttered motor carriers by establishing new requirements for obtaining registration and USDOT numbers. FMCSA also requires disclosure of the carrier's common relationship with and/or ownership, management, control, or familial relationship to any other person or employer that intentionally did not comply with registration requirements (49 USC § 13902).

Safety Fitness of New Operators – FMCSA has been authorized to establish new, minimum-entry-level training requirements for commercial drivers. The training would have to be completed before a driver could obtain a CDL or upgrade to another CDL class. FMCSA has also developed a National Consumer Complaint Database that is designed to improve motor carrier safety enforcement and consumer protection (FMCSA.com).

Safety Audits – New bus companies are required to pass comprehensive safety audits and undergo safety reviews within a specified time before beginning operations. A driver's CDL may also be revoked for drug- and alcohol-related offenses that occur in non-commercial vehicles. (USC 49 § 31310, § 31144, § 521).

FMCSA: Holding Motor Carriers and Drivers to the Highest Level of Safety

Medical Qualifications of Drivers – Beginning January 30, 2012, state driver licensing agencies (SDLAs) will be required to add medical certification status, and related information to the medical examiner's certificate, to a CDL holders' commercial driver's license system (CDLIS) record. CDL holders must provide information to their SDLA regarding the type of commercial motor vehicle they operate. Drivers operating in certain types of commerce will be required to submit a current medical examiner's certificate to their SDLA to obtain "certified" medical status as part of their driving record or risk losing their CDL ("New Medical Certification Requirements").

Addressing Driver Fatigue – FMCSA has pledged to conduct research and explore technologies to detect fatigue of motorcoach drivers. On April 5, 2010, FMCSA published a final rule titled "Electronic On-Board Recorders (EOBRs) for Hours-of-Service Compliance," which was revised by a technical amendment on September 13, 2010. The final rule approved new performance standards installed in commercial motor vehicles manufactured after June 4, 2012. In June 2010, the Owner-Operator Independent Drivers Association, Inc. filed a petition to challenge the final rule and the U.S. Court of Appeals rescinded the final rule (Federal Register 2011). The final rule, however, permits a motor carrier to voluntarily require a driver to use an EOBR to record each driver's hours of service (Federal Register, 2012).

Distracted Driving – FMCSA and the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a final rule in December 2011 to restrict the use of hand-held mobile telephones by CMV drivers (Federal Register 2011). CMV drivers are prohibited from texting while driving and using handheld wireless devices. The ruling allows for violators to be stripped of their ability to operate in interstate commerce, and corresponds with one tenet of the DOT's action plan in combatting distracted driving. A ban on the use of handheld electronic devices went into effect in January 2012 (Motorcoach Action Plan update 2012).

Reincarnated Carriers – FMCSA is targeting enforcement action against motorcoach carriers that violate safety rules, operate without registration, are declared an "imminent hazard," and/or attempt to evade safety practices as a reincarnated carrier. Stiffer sanctions are also promised against unscrupulous operators that fail to

disclose relationships (common ownership, management, control, or familial relationships) with companies that evade registration or continue to operate illegally.

Electronic Logging Devices – This provision requires electronic on-board recorders, which are tamper resistant and log a driver's hours of service, and other information that must be available to law enforcement during an inspection. It is to be applied to vehicles two years after the final rule is in effect (49 USC § 31502).

Hours of Service Limitation – In December 2011, a final rule was enacted to limit hours of service for motorcoach drivers in order to reduce the risk of fatigue-related crashes and fatigue-related health problems of drivers. The rule addresses driver fatigue by limiting the maximum number of hours per day and week that drivers can work. The final rule went into effect July 1, 2013. While the final rule retains the current 11-hour daily driving limit, it:

- Reduces a driver's average maximum allowable hours of work per week to 70 hours:
- Requires a driver to take at least a 30-minute break after working more than eight consecutive hours;
- Imposes a "34-hour restart" requirement, to be used once during a seven-day period, to allow drivers to restart the workweek by taking at least 34 consecutive hours off-duty; and
- Authorizes fines and civil penalties for companies/drivers that violate the rule (Federal Register 2011).

FMCSA: Removing Unsafe Operators

Compliance, Safety, Accountability (CSA) Program – Initiated by FMCSA in 2010, the CSA is a program designed to reduce commercial motor vehicle crashes, injuries, and fatalities that are related to commercial motor vehicles. CSA initiates a new enforcement and compliance process that incorporates three elements: 1) measuring safety performance to identify high-risk carriers, 2) evaluating safety fitness of motor carriers, and 3) intervening to address safety problems before crashes occur. CSA incorporates FMCSA's new Safety Measurement System (SMS), a new performance-based, data-driven safety enforcement program ("About CSA").

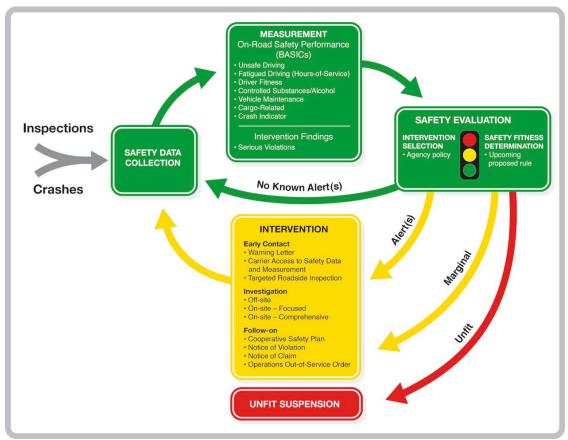


Figure 15: Diagram demonstrating CSA Operational Model for determining Safety Fitness (FMCSA)

Safety Fitness Determination Procedures – As part of its CSA, FMCSA instituted a safety fitness regulation called "Safety Fitness Determination Procedures," which assigns safety ratings and a safety fitness standard to assess the ability of motor carriers to operate safely. A motor carrier must achieve a "satisfactory" safety rating in order to continue to operate. FMCSA has the authority to revoke a carrier's operating authority registration if it fails to comply with safety fitness requirements and is deemed to be "unfit" based on its safety fitness procedures (Federal Register 2012).

On November 23, 2012, FMCSA issued final rule for 49 CRF Part 35, which strengthens compliance with safety fitness requirements and safety ratings. Previously, if a motorcoach carrier received an unsatisfactory safety rating by FMCSA, a 45-day period was granted to take corrective action. A discretionary 10-day extension period could also be granted, which lengthened the time that an unsafe operator could be on the road. The final ruling rescinds the additional 10-day grace period and requires corrective action to be taken within the 45-day period (Federal Register, Volume 77, 205).



Figure 16: Seven Behavior Analysis and Safety Improvement Categories (BASICs) (FMCSA Fact sheet)

Roadside Safety Inspections – FMCSA maintains an investigative unit that performs inspections, in cooperation with state partner agencies, and has the power to shut down a motor carrier. FMCSA's roadside inspection program is important in carrying out the SMS, identifying high-risk carriers and/or drivers, and improving commercial motor vehicle safety. Safety inspectors are trained to look for seven Behavior Analysis and Safety Improvement Categories (BASICs) during an inspection. Safety-related violations identified during a roadside safety inspection serve as the foundation of the CSA measurement system ("FMCSA and State Partners"). However, one of the major obstacles to safety oversight is that federal law prohibits en-route inspections of motorcoaches while carrying passengers unless the vehicle is regarded as an imminent hazard or a moving traffic violation is observed.

Motor Carrier Safety Assistance Program (MCSAP) – This federal grant program provides financial assistance to states to reduce the number and severity of accidents and hazardous materials incidents involving commercial motor vehicles (CMV). The program provides funding to work in partnership with FMCSA and other agencies to improve CMV safety, and reduce CMV-involved accidents, fatalities, and injuries.

MCSAP sets forth the conditions for participation by states. The program also promotes consistent, uniform, and efficient state safety programs by providing funding for driver and vehicle inspections, traffic enforcement, carrier reviews, public education and awareness, and data collection. MCSAP supports state partner activities to prevent crashes and to ensure compliance with safety standards, and takes action against individuals or entities that do not meet these standards. MCSAP provides 80 percent federal funding and requires a 20 percent state match (USC 49 CFR Part 350). Future state funding levels under MCSAP are tied to allocations provided under the new surface transportation authorization bill, MAP-21.

Enforcement and Strike Force Operations – FMCSA's SMS enables safety investigators to monitor the roadside performance of drivers over a three-year period, identify drivers with poor safety records, and prompt investigations. When investigations verify driver violation(s), FMCSA can take enforcement action against the driver by issuing a Notice of Violation or a Notice of Claim ("Driver Safety Enforcement: What Motor Carriers Need to Know"). In fiscal year 2011, FMCSA and state agency partners conducted more than 114,000 inspections and 1,500 compliance review checks nationwide (Ferro). According to a DOT press release, FMCSA's roadside motorcoach inspections increased nearly 100 percent—from 12,991 in 2005 to 25,705 in 2010; compliance reviews rose 128 percent—from 457 in 2005 to 1,042 in 2010 (FMCSA 38-11).

To enhance oversight of carriers attempting to evade sanctions and identify unsafe motorcoach carriers, FMCSA encourages safety enforcement and outreach through statewide strike forces. Coordinated during a short timeframe, strike force operations target specific motorcoach operations such as intercity buses operating in heavily traveled interstate transportation corridors and non-traditional curbside service. Statewide strike forces may be conducted separately or in collaboration with national, regional, or local law enforcement agencies' motorcoach strike force activities, and are part of the ongoing safety programs of FMCSA (update 2012). MAP-21 legislates that FMCSA consider requiring states to develop inspection programs (Motorcoach Action Plan update 2012). According to a series of FMCSA news releases, recent strike force activities by date include:

March 12 – 28, 2011 – During this 17-day period, an estimated 3,000 passenger carrier safety inspections were conducted across the country, resulting in nearly 300 passenger carrier vehicles being put out of service (FMCSA 09-11).

March 28 – April 6, 2011 – During this 9-day period, 2,782 surprise passenger-carrier safety-inspections were conducted by FMCSA and partner agencies that resulted in 289 unsafe buses or drivers being removed from roadways. The

coordinated enforcement strike force issued out-of-service violation citations to 156 drivers and 262 vehicles (FMCSA 09-11).

December 17 – 23, 2011 – This multi-agency motorcoach enforcement effort was conducted in collaboration with the Pennsylvania State Police. As a result, 218 motor carriers were inspected throughout Pennsylvania; 21 motorcoaches and five drivers were taken out of service for various violations. As a result of this strike force operation, Pennsylvania-based Chinatown bus company Double Happyness Travel, Inc. was ordered to cease operations and was declared an "imminent hazard" to public safety. An extensive review of the company's operations, which preceded the order, found multiple hours-of-service, vehicle maintenance, and controlled substance and alcohol testing violations (FMCSA 38-11).

January 21 – 27, 2012 – This multi-agency motor carrier enforcement effort involved FMCSA, Pennsylvania State Police, Pennsylvania Public Utility Commission, and local enforcement agencies. During this period, 220 motorcoaches were inspected in Pennsylvania, 15 motorcoaches and 23 drivers were placed out-of-service for safety violations ("15 Motorcoaches, 23 Drivers Taken Out-of-Service").

May 31, 2012 – Following a yearlong investigation and as a result of the "largest single safety crackdown in the agency's history," FMCSA shut down 26 bus operations, and 10 individual bus company owners, managers, and employees were declared "imminent hazards to public safety." The shutdown orders were issued to one ticket broker, nine active bus companies, and thirteen out-of-service companies that continued to operate, and three new applicant companies. Three primary companies were closed that represented a host of smaller companies and, when combined, transported 1,800 passengers per day along the I-95 corridor. Apex Bus, Inc., I-95 Coach, Inc., and New Century Travel, Inc. were issued out-of-service orders for multiple safety violations involving vehicle maintenance, hours-of-service, and driver qualifications (FMCSA News Release 14-12).

FMCSA: Outreach and Public Information

As previously discussed, FMCSA has launched an extensive outreach and education program that is primarily designed to help employers, drivers, brokers, and operators become more familiar with issues affecting the commercial motor vehicle industry. Much of the information pertains to FMCSA's rulemaking, registration and licensing, and safety and security initiatives. Some links to motor carrier regulations, governed by other federal agencies (e.g., ADA and emissions) are provided. Regulatory information is also categorized by carrier type (e.g., motorcoach, mini-bus, private passenger vehicle, school bus, limousine, passenger van). However, there is no

comprehensive list/description of federal regulations that govern each type of passenger vehicle—a series of lists must be accessed to glean this information.



Figure 17: FMCSA's homepage (www.fmcsa.dot.gov/)

FMCSA's website now targets outreach efforts toward bus passengers. FMCSA's National Consumer Complaint Database and the new *SaferBus* app are featured on a scrolling web banner on the FMCSA homepage. The "Quick Links" tab features topics within the Consumer Protection category, as displayed in Figure 17 (FMCSA.com).

The *SaferBus* app can be installed on a mobile device or tablet to obtain access to a bus company's operating authority and insurance status, safety performance record, and safety ratings. While the *SaferBus* app is an excellent resource, it is not clear how the new app is being marketed to the general public, if press releases about the app have been issued to partner agencies and stakeholder organizations, and/or whether these partner agencies/stakeholders provide links to FMCSA's *SaferBus* mobile app webpage. In addition, the *SaferBus* app does not make a clear distinction that bus brokers are different from bus carriers. Consumers who search the *SaferBus* app using the name of a bus brokerage firm, rather than the name of a bus company that provides actual transportation services, may receive a "name not found" response. Such was the case when bus brokerage firms of Xinnix, GotoBus, and Bus-DC-NY were searched. Upon further exploration of brokerage firm websites, each firm represented

a list of motorcoach operators—some with questionable safety records. Finally, when the bus company "New Everyday Bus Tour, Inc." (believed by the Institute for Public Administration to be an affiliate of the shuttered Double Happyness, Inc.) was searched on the app one description alerted consumers of its unsatisfactory safety rating and one description stated (in bold, red ink), "Not allowed to Operate."

FMCSA's Enhanced Oversight and Rulemaking under Moving Ahead for Progress in the 21st Century

President Obama signed MAP-21 on July 6, 2012, which reauthorized surface transportation programs through fiscal year 2014. This reauthorization amends the Federal Transit Laws codified in 49 USC Chapter 53 that was previously called Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Title II of MAP-21, the Commercial Motor Vehicle Safety Enhancement Act of 2012, includes several provisions targeted at safe motorcoach operations, which would be implemented through enhanced rulemaking, authority, and oversight by FMCSA. A synopsis of key provisions applicable to the curbside intercity bus industry is provided in Appendix E and is highlighted below.

- **Use of electronic on-board recorders (EOBRs)** will be required to monitor compliance with hours-of-service regulations for all motor carriers that maintain driver logs and are engaged in interstate commerce.
- **Stronger registration requirements** will be imposed, including disclosure of common ownership or management, written proficiency examination for new entrant motor carriers, and safety fitness of new operators.
- **Minimum-entry level training** will be required for commercial drivers and must be completed before obtaining a CDL or upgrading to another CDL class. Training regulations must address knowledge and skills for motor vehicle operation, address specific requirements for hazardous-material- and passenger-endorsements, create a certificate system for meeting requirements, and require training providers to demonstrate that their training meets uniform standards.
- **Electronic medical certificates** must be accepted by all states from federal medical examiners.
- **National database enhancements** will provide information on commercial motor vehicle drivers who have failed/refused a DOT drug/alcohol test.
- Safety fitness reviews must be conducted within 120 days for new motorcoach operators.
- **Tougher oversight** will focus on violations of motor carrier safety rules, such as reincarnated drivers and out-of-service orders.

- Enhanced enforcement will be granted to FMCSA to revoke, amend, or suspend registration of carriers that violate safety rules, operate without registration, evade requirements as a reincarnated carrier, are declared an imminent hazard, or operate unsafely or illegally. Federal and/or state officials also have the authority to immediately impound a vehicle—or an entire fleet of vehicles—that fail to pass inspection.
- **Safety belt** installation, in new and existing motorcoaches, will be governed under new regulations.
- **Tire pressure monitoring** will be considered to upgrade tire performance standards and require motorcoaches to be equipped with monitoring systems.
- **Testing/research** will be authorized for FMCSA to conduct studies to explore causes of and prevention methods for motorcoach fires and to enhance occupant impact protection technologies.
- **Safety fitness rating system** will be assessed by FMCSA every three years for motor carriers and annually for urban carriers with "high passenger loads."
- **Stiffer penalties** will enable FMCSA to penalize, suspend, or revoke registration of carriers who violate registration requirements, engage in a pattern of noncompliance, and conceal noncompliance; a vehicle or entire fleet may be impounded for violation of an out-of-service order.

MAP-21 gives FMCSA new authority to "revoke the operating authority registration of a motor carrier that fails to comply with an administrative subpoena or a letter demanding release of company safety records" (FMCSA 2013). FMCSA used this new authority to shut down New York- and Boston-based Fung Wah Bus Transportation in March 2013. According to the out of service order issued by FMCSA, Fung Wah "does not maintain its older fleet of commercial motor vehicles in a safe and proper operating condition and not in accordance with manufacturer's specifications and Technical Service Bulletins, and does not systematically inspect, repair, and maintain...certain older motor vehicles subject to its control" (FMCSA 2013). Because Fung Wah had failed to cooperate with federal inspectors, its entire fleet of 28 motorcoaches was declared an imminent hazard to public safety and placed out of service (FMCSA 2013).

8.7 Opportunities and Challenges

MAP-21

Title II of the Commercial Motor Vehicle Safety Enhancement Act of 2012 provides FMCSA with greater authority to address safety, compliance, and enforcement issues in the motorcoach industry. It expands FMCSA's ability to manage and monitor new entrants in the industry, as well as to penalize/suspend or revoke registration of carriers who violate registration. It also provides regulations for improved occupant protection, passenger evacuation, and crash avoidance. A comprehensive approach is sanctioned to conduct safety review of motorcoach service providers, monitor safety performance of motor carriers, update the safety fitness rating system, and disclose safety performance ratings. In addition, scientific studies will inform rulemaking governing physical-safety enhancements and redesign of vehicles; a timeframe for and concurrency in rulemaking is mandated.

Title II of MAP-21 advances FMCSA's mission to prevent commercial motor vehicle-related crashes, fatalities, and injuries. Yet fulfillment of MAP-21 directives and FMCSA-mandated activities will require strong partnerships with federal-, state-, and local-enforcement agencies, motor carrier industry advocates, labor organizations, and safety-interest groups. MAP-21 will require state transportation departments to elevate bus-, truck-, and motorcoach-inspection programs, standards, and enforcement efforts. In the past, there was an issue with states using a disproportionate amount of MCSAP funds for truck inspections rather than bus inspections. It's not clear if MAP-21 legislation will ensure that states allocate sufficient MCSAP funds and inspection resources to motor carriers versus other trucks and commercial vehicles. Moreover, MAP-21 legislation still does not authorize motorcoach inspections to be conducted en-route by FMCSA or its law enforcement partners.

In addition, grant program funding within MAP-21 remains flat from previous funding levels. The Bus and Bus Facilities Discretionary Program has been consolidated into other programs that now have stagnant funding levels. Moreover, Over-the-Road Bus Transportation Accessibility Program Grants have been eliminated under MAP-21. This grant made funds available to private operators (including curbside operators) for training and capital costs associated with compliance of DOT rules to make buses fully accessible. Additional funding pressures will continue to stress FMCSA's already stretched resources and staffing for bus inspections and strike-force operations. In the face of funding constraints and resources, FMCSA now must also respond to a large number of rulemakings, reports, and programs within a compressed two-year timeframe.

Effective Safety Oversight

A NTSB paper, submitted at the 2012 Annals of Advances in Automotive Medicine (AAAM) Conference, reported outcomes of focus group sessions and non-structured interviews with drivers and federal/state safety officials. Several major challenges to enforcement and safety oversight were documented. First, growth of the industry has impacted the workload of federal and state safety inspectors. There is a shortage of federal and state personnel certified to perform commercial motor vehicle inspections and compliance reviews (Braver, Dodd, Cheung, and Long, 2012). Inspectors stated that they often did not have sufficient time to complete resource-intensive compliance reviews. Inability to conduct en-route inspections for curbside buses that do not use traditional terminals was also problematic. Falsification of vehicle maintenance reports, driver logbooks, bogus contact information, late/inaccurate reports, insufficient fines, and limitations of new entrant carrier safety audits all were cited by inspectors as obstacles to effective safety oversight (Braver, Dodd, Cheung, and Long, 2012). Although there are limitations to focus groups, researchers stated that FMCSA database information supports inspectors' concerns but that further qualitative research is needed. Enhanced FMSCA rulemaking, authority, and oversight by FMCSA under Title II of MAP-21 may help to address some safety concerns expressed by drivers, safety inspectors, and investigators.

9. State and Local Government Initiatives to Regulate and Manage Curbside Intercity Bus Operations

9.1 State Legislation to Regulate Curbside Usage

As previously discussed, the federal government has formed partnerships with state and local government agencies to address motor safety issues. States and local governments are developing strategies to manage impacts of the growth of the curbside intercity bus industry—especially those states within the Northeast Corridor that have been impacted by public safety issues or crashes involving loss of life. While federal legislation primarily addresses safety issues, state legislation primarily deals with other issues such as congestion, curb usage, idling, and licensing and permitting. Local government regulation has focused on policies, pricing strategies, and regulations to manage curbside use. Privatization of curb rights, curbside permitting systems, enforcement activities, and planning and development of intermodal facilities are among the municipal approaches to manage impacts of the curbside intercity bus industry.

New York State

In June 2012, the New York State Legislature passed NS4313-2011 (also S4313B-2011), which authorizes a permitting system for cities having a population of one million or more (nysenate.gov). The measure amends the vehicle and traffic law and was signed into law by Governor Cuomo in August 2012. Specifically crafted to create a permitting system for intercity buses in New York City, it also provides the city with new authority to regulate the curbside intercity bus industry and designate pick-up and drop-off locations.

The cry for state legislation was initiated in response to the growth of the curbside intercity bus industry in New York City. City officials were concerned with the proliferation of buses causing increased traffic congestion, pedestrian safety concerns, litter, unhealthy emissions, and dangerous conditions by double- and triple-parking.

New York Assembly Speaker Sheldon Silver and State Senator Daniel Squadron cointroduced the legislation in 2011 with support from Assembly Member Grace Meng. The legislation was introduced at the urging of New York City council members. In a joint news release issued in March 2011 by the bill sponsors and New York City Council, City Council Transportation Chair James Vacca said, "...The federal government has failed to properly regulate these buses, and as they traverse city streets and serve city residents, the City has a right to know which companies are operating within our borders, where they are picking up and dropping off passengers, and whether they meet even the minimum federal safety standards. This bill will allow our City, for the first time, to take steps to rein in this runaway industry" (New York City Council 2011).

Commonwealth of Massachusetts

First introduced as Bill H. 3092 by Joseph Wagner during the 187th legislative session and again as Bill H. 3165 during the current, 188th session, the act is proposed to create a Motor Carrier Advisory Council in the Commonwealth of Massachusetts. The advisory council will make recommendations to eliminate the duplication of state agency work, promote the uniformity of enforcement policies, and consolidate state regulation and oversight of the commercial motor carrier industry. The council would be comprised of officials from the state-policy commercial-vehicle enforcement section, Federal Motor Carrier Safety Administration (FMCSA), Massachusetts Department of Transportation (MassDOT), state registry of motor vehicles, state EPA, and Massachusetts Motor Transportation Association. The Senate concurred with the bill and it was referred to the Joint Committee on Transportation as of January 22, 2013 (Mass. Legislature).

9.2 State Laws to Regulate Idling

States have adopted idling laws to diminish harmful gas emissions, manage air quality, decrease noise, save fuel, reduce maintenance needs, and improve safety and health to drivers, pedestrians, and citizens at large. Most states in the Northeast Corridor have laws that impose a maximum idling time for heavy duty or dieselpowered vehicles. A table of Idling Laws of Select States in the Northeast Corridor is provided in Appendix A.

Maximum idling time may consider factors such as temperature, type of vehicle, vehicle activity, and location. For example, the state of Delaware restricts the idling of heavy duty vehicles to three minutes for temperatures above 32°F, fifteen minutes for temperatures of 32°F to -10°F, and no limit for temperatures below -10°F. Most states restrict idling times to a range of three- to five-minutes maximum. Fines vary by state, but start as low as \$50 for a first offense in Delaware and as high as \$500 for a first offense in the District of Columbia. Fines rise considerably or even double for each subsequent offense. Maximum fines imposed per offense range from \$500 (Delaware, Massachusetts, and Maryland) to fines reaching \$22,500 in New York and \$25,000 in Virginia.

Most states allow exemptions to idling laws. Examples of exemptions include operating under traffic conditions, emergency or law-enforcement purposes, and mechanical difficulties, auxiliary power conditions, waiting for state inspections, and parking during extreme weather conditions. Because most states have long lists of exemptions, it is not clear whether laws can be realistically enforced. However, as more curbside intercity buses dominate the landscape of urban streets waiting for passengers to load and disembark, both state idling laws and new local-government idling laws may gain prominence as a tool to manage intercity bus curbside operations.

9.3 Municipal Management Approaches

Privatization of Curb Rights

In 1997, The Brookings Institution published "Curb Rights," which explored the concept of privatizing curbspace. Authors proposed that property rights be established for curb zones and transit stops to enable urban transit systems to reap the rewards of market competition and eliminate the need for inefficient government regulations. Once "curb rights" are established, bus stops and other curbside pick-up points could be leased to the highest bidder by auction. While this concept was proposed well before the advent of the curbside intercity bus industry, leasing of curbside space is being considered by several local governments as a strategy to manage curbside operations of intercity buses and other motorcoach operators.

A permitting system where municipalities have control over the use of their streets and sidewalks seems to solve some issues relating to curbside carriers. A permitting system where operators apply and must be approved would levy responsibility on carriers to comply with city guidelines concerning these issues.

Municipal Regulation of Curbside Intercity Buses

New York City – The city regulates the curbside intercity bus industry indirectly through the enforcement of existing ordinances and regulations. New York City's Police Department, Department of Environmental Protection, and Department of Consumer Affairs enforce existing ordinances that govern parking, idling, and loading and unloading (NYC Department of City Planning, 2009). BoltBus has moved some departures to the Port Authority of New York and New Jersey (PANYNJ) in order to "work with the City of New York's Department of Transportation (NYC DOT) to help ease congestion at its curbside locations" (BoltBus press release). However, PANYNJ's bus terminal is at capacity and cannot accommodate Megabus's double decker buses. Moreover, price may be a factor in weeding out smaller, non-corporate intercity bus companies from using PANYNJ facilities. A bus slip at the PANYNJ Bus Terminal in

New York City costs roughly \$40 per departure, \$6,500 for annual platform, and an additional \$13,000 to \$19,000 for use of the station gate (Graham Beck 4). NYC DOT was criticized for allowing Megabus to operate on the street outside PANYNJ without paying fees, while competitors like BoltBus pay a steep price. On August 1, 2012, Megabus departures in New York City moved to 34th St between 11th and 12th Avenue. The 34th St stop is located across the street from the Javits Center, which is three blocks west of Penn Station.

A bill signed by Governor Cuomo in August 2012 gives the city much more power to regulate bus stop locations. The new system allows New York City to designate streets and locations on those streets for passenger loading and unloading of intercity buses. Charter and tour buses are specifically exempt from the measure. This bill establishes a city agency responsible for reviewing, approving, and disbursing permits to designate locations for curbside drop-off. It will also establish bus company identification rules and require operators to submit information about their operations for approval. The permitting system is expected to help alleviate curbside and traffic congestion as well as ensure greater intercity bus industry accountability. Finally, the law includes a provision to require input from the public, local community boards, and the Metropolitan Transportation Authority before bus stop locations are designated. Online posting of approved bus applications and intercity bus stops would allow for continuous feedback from the public and other stakeholders.

In September 2012, NYC DOT initially approved then quickly rescinded an application from Greyhound/Peter Pan for a new bus stop on Essex Street near Seward Park, due to public opposition. As of spring 2013, proposed rules drawn up by NYC DOT that would "grandfather" or provide a grace period to existing curbside intercity bus operators for a three-year period. Under the NYC DOT proposals, bus operators would be charged a yearly fee based on their number of weekly pick-ups and drop-offs. A series of public workshops were being held to solicit public opinions on the proposed system.

Washington, D.C. – In 2011, the Washington, D.C. Department of Transportation (DDOT) hosted a D.C. Motorcoach Summit with transportation stakeholders to discuss motorcoach parking needs and deficits. In addition to stakeholder input from the summit, DDOT used information from previous studies, surveys, industry input, and field observations to develop a comprehensive *Motorcoach Action Plan*. Within the plan were recommendations for routing of motorcoaches within D.C., directional signage to parking locations, regulations based on type of motorcoach, and a regulatory enforcement program. Plans for new technology include a motorcoach parking reservation system and mobile/web application with real-time information (DDOT 2011).

As part of the plan, new legislation was crafted that pertains specifically to curbside intercity buses and the use of public curb space. In June 2011, the District amended Title 24, "Public Space and Safety" of the District Code of Municipal Regulations (DCMR) to add a new chapter 35, "Intercity Buses" (DCMR). The new regulations require intercity bus operators to apply for and obtain a public space permit, pay an annual permit fee, display the permit when occupying a passenger loading zone, and cease operations during rush hour. To foster District management of intercity buses, the new regulations clearly define "intercity bus service provider," require each carrier to provide information on routes and locations of signs, establish a public space committee to review and approve bus stop locations, and institute a fee structure based on time of usage and space needed to operate (DDOT 2011).

Philadelphia, **Pa.** – The City has corralled motorcoaches and tour buses into specialized centers for bus parking (21-26). The site behind 30th Street Station, where BoltBus and Megabus operate, is on the 3100 block of John F. Kennedy Boulevard (JFK Blvd.) and has one space for departures and two arrival spaces. Additionally, the city has limited arrivals and departures to three per hour. It removed nine metered spots for this bus stop location on JFK Blvd. Currently the city has a total of five dedicated spaces. In order to secure these spaces for bus use, the operator must replace meter revenue, which amounts to \$25,000 per year for three spaces (Buckley). Chinatown buses have a different curbside location with two curbside spaces for loading/departure. The curbside location is adjacent to the Greyhound Station near Race Street and 11th Street in Chinatown.

Boston, Mass. – The City passed an ordinance in 2004 that effectively eliminated curbside boarding of motorcoach passengers (including curbside intercity bus passengers) and consolidated all bus operations at the South Station Terminal. Administered by the Massachusetts Bay Transportation Authority, the terminal serves as an intermodal facility for buses, regional rail, subway, and commuter rail to facilitate transit connectivity (Metro Magazine, Steve Bailey, Boston Globe).

Master Planning and Public-Private Partnerships

In addition to the *Motorcoach Action Plan*, master planning is transforming Washington D.C.'s Union Station into a state-of-the-art intermodal transit facility with mixed-use development opportunities. The Union Station Redevelopment Corporation (USRC) received authorization, as a privately owned nonprofit organization, to develop a *Union Station Master Plan* and oversee restoration. The *Plan* outlines the infrastructure and capital requirements to transform D.C.'s Union Station into a premier intermodal transit facility. The master plan was developed in response to a July 2009 subcommittee of the House Transportation & Infrastructure Committee's

federal directive to implement "The Congressional Vision for a 21st Century Union Station: New Intermodal Uses and a New Union Station Livable Community" (USRC 2010). Stakeholders that collaborated on the development of the plan included Amtrak, DDOT, the Washington Metropolitan Area Transit Authority (WMATA), Greyhound Lines, Inc., and two private developers that control plans for retail and mixed-used development of the station (USRC 2010). Transportation aspects of the \$165 million *Master Plan* call for improving the existing rail concourse, expanding Metrorail accessibility, improving station safety and security, and integrating intercity bus service (USRC 2010). Economic development plans include comprehensively improving and expanding station restaurants, shops, and services; restoring and preserving historic features of the station; and adding 3-million square feet of new office, residential, hotel, and retail space.

In April 2011, following DDOT's decision to regulate intercity bus operators, the Secretary of Transportation tasked the USRC with creating a plan to incorporate curbside intercity bus operations into Union Station. Union Station was given 90 days to develop a plan that included a design to accommodate double-decker buses as well as meet Americans with Disabilities Act of 1990 (ADA) standards; a financial plan; and an offsite alternative for tour bus parking (Baker). DDOT and the Union Station Redevelopment Corporation agreed to centralize intercity bus operations at Union Station beginning fall 2011 (DDOT 2011).

A financial plan was designed for both the costs of operating and maintaining the bus deck and for making capital improvements. These capital improvements included onsite amenities, such as information kiosks, ticket facilities, a waiting room, and also an offsite parking lot for tour buses. To address the operation and maintenance costs, the USRC created a per-slip fee of \$2,500 a month or \$30,000 per year. The identified capital improvements would be paid for by a fee of \$0.75 per passenger whose bus trip originated or terminated in Union Station. (Robert Thomson 1). However, usage of Union Station is not mandatory. Benefits to drivers and residents near curbside pickups are obvious, but benefits to intercity bus companies of utilizing Union Station include reduced nuisance in dealing with fines and penalties associated with curb usage.

9.4 Advanced Framework to Regulate/Manage Municipal Curb Space

In most dense, urban-core areas, there is fierce competition for limited curb space. In 2011, the Philadelphia Mayor's Office of Transportation and Utilities interviewed eight major cities on curb space management on behalf of the National Association of

City Transportation Officials (NACTO). The interview formed the basis of a paper, which was submitted to the Transportation Research Board's (TRB) 2012 annual meeting. The paper examines the current state of municipal curb space regulation and management and seeks to advance a framework to formulate future practices.

Parking		1500		New You					
	Max Pricing (per hour)	\$2	\$1.25	\$5	\$3	\$2.50	\$6	\$4	\$2
	Zonal Pricing ^a	yes	yes	yes	yes	yes	yes		
	Variable Pricing ^b						yes	yes	yes
	Demand Pricing ^c				pilot		yes	yes	pilot
	Real Time Data						yes		
	RRPs (per year fee)	\$20	\$0	\$25		\$20/35	\$98	\$65 /2yr	\$15
Loading	Individual Request	yes	yes	yes	yes	yes	yes	yes	
	Loading Zone Fee	\$0	\$0	\$25	\$0	\$250	\$0	\$45-150	
	Metered Loading				yes				yes
Other	Curbside Private Buses	yes		yes	yes	yes			yes
	Curbcut DOT Review ^d	yes	limited		limited	limited	yes		
	Parklets				yes	yes	yes		
	Curbside Bike Parking	yes		yes			yes	yes	yes
	Curbside Bike Share		yes						

a. City broken up into contiguous meter rate zones

Figure 18: Chart of Curbside Management Policies (Zalewski, Buckley and Weinberger 3)

Policies, pricing strategies, and regulations were examined that are used by eight cities to govern all types of curbside use—including parking, commercial loading and

b. Prices vary on a street-by-street basis

c. Meter rates set to achieve occupancy / turnover target

d. Cities where DOT has a say in permitting new curb cuts. Cities with limited review limit the review process to certain focations or uses.

deliveries, transit operations, (curbside) intercity bus operations, and other uses. Factors influencing curbside policy varied and were impacted by physical conditions of a city, types of curbside use, local laws and delegation of power, the political climate, and state law restrictions on local government authority (Zalewski, Buckley and Weinberger 2011).

The study noted that most cities use an incremental model of curbside management, where policies develop in a reactive stance to new issues. While the paper does not specifically focus on management of curbside intercity bus operations, it provides an overview of curbside management policies of eight large cities. Five of the eight cities surveyed have adopted policies that govern curbside intercity buses as shown in Figure 18.

Finally, two approaches are recommended to help cities deal holistically with congestion, competition for limited curb space, reduced mobility, and need to balance supply and demand—including impacts that may be associated with growth of the curbside intercity bus industry. First, a framework model is suggested to change existing practices and provide a rational and comprehensive planning approach to manage all curbside space in a specific area (Zalewski, Buckley and Weinberger 12). This model has been practically applied within the cities of Philadelphia and New York City. Second, an innovative performance-pricing model is introduced, which uses market pricing to manage the supply of curb parking. While simple to implement, it may cause equity issues. Those most able to afford the price of a public curbside space may not be providing the greatest community benefits. While this strategy has not been practically applied on a widespread basis, it can be achieved through the use of technology, real-time monitoring systems, and a favorable climate for policymaking and stakeholder buy-in (Zalewski, Buckley and Weinberger 14).

10. Perspectives of Industry Advocates

Due to the policy opportunities and challenges that exist with the curbside intercity bus industry, many stakeholders have voiced praise as well as concerns regarding the growing sector. Transportation advocacy groups largely support the curbside bus industry for a variety of reasons, including the industry's role as a transportation alternative, an efficient and inexpensive transportation mode, and its environmental friendliness. Opposition to the curbside intercity bus regulation tends to center around safety concerns, working conditions for drivers, and fair competition between intercity bus carriers. The organizations discussed in this section represent a balanced overview of the support and concern expressed about the intercity curbside bus industry.

10.1 Transportation for America

Transportation for America is a broad coalition of organizations that cooperate through their advocacy work to improve the U.S. transportation system on the federal, state, and local levels. Transportation for America advocates for an improved transportation system to help address national challenges including climate change, energy security, health, housing, and economic development. To improve the U.S. transportation system, Transportation for America advocates to reform the method of selecting projects for funding, create a safer transportation system, and ensure tax dollars are being used as effectively as possible (Transportation for America – About the Campaign).

In general, Transportation for America is a proponent of mass-transportation systems, increased transportation choices, and efficient and environmentally friendly transportation modes. Transportation for America has identified this industry as a significant possibility to address current transportation challenges. A recent report co-authored by this entity identified the intercity bus industry as one of seven major taxpayer-friendly solutions to U.S. transportation challenges. The report praised the industry for improving access to transportation, reducing delays and congestion on roadways, decreasing fuel consumption, and decreasing vehicle emissions. This report also notes that the industry operates with little federal subsidy. It stated, "Bus travel extends the capacity of the existing highway system, provides network redundancy, increases consumer choices, and reduces congestion. In doing so, bus travel saves energy, promotes environmental stewardship, and reduces our dependence on foreign oil with little to no cost to taxpayers" (Transportation for America, et. al. 31-33).

In another report titled, *Route to Reform: Blueprint for a 21st Century Federal Transportation System*, the organization recommended that the United States Department of Transportation (USDOT) establish a new office focusing on intercity travel and that they see buses as an important part of the goal of a "seamless national intercity" transportation network.

10.2 The CATO Institute

The CATO Institute is a public policy research organization based in Washington, D.C. It conducts public policy research on a number of subjects, within the context of their guiding principles of "individual liberty, limited government, free markets, and peace." The CATO Institute's research and advocacy work tends to focus on ensuring social and economic freedom as a priority over government regulation and intervention ("About CATO").

In June 2011, the CATO Institute released a policy analysis of the curbside intercity bus industry. The report, titled "Intercity Buses – The Forgotten Mode," examined the growth of the industry. A large component of the report compared the intercity bus industry to regional rail transportation, especially with respect to safety and each industry's effect on the environment. The report regards the curbside intercity bus industry as a direct competitor to Amtrak because, in many cases, it provides comparable service at a lower cost and without government assistance. For example, the report notes that in 2011 intercity bus fares averaged \$0.13 per passenger mile, whereas Amtrak fares averaged \$0.31 per passenger mile (The CATO Institute 5). With regard to the environment, the analysis found the intercity bus industry to be more environmentally friendly than rail service. It noted that diesel-powered Amtrak trains produce 2.5 times the carbon emissions produced by intercity diesel buses (The CATO Institute 6). The report concluded that curbside intercity buses are a viable and inexpensive alternative to high-speed rail investment.

10.3 Transportation Trades Department, AFL-CIO

Within the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), the Transportation Trades Department (TTD) represents 32 unions made up of members who work in transportation-related industries. TTD represents the interests of unionized transportation workers with respect to federal transportation policy. TTD accomplishes its work by issuing policy statements that articulate TTD's position on federal issues; participating in Congressional hearings; and commenting in response to proposed federal rulemakings, final rulemakings, and petitions for rulemakings.

TTD has released a number of policy statements regarding the curbside intercity bus industry. Specifically, TTD policy statements raise concerns over safety violations and fairness of competition among intercity bus carriers. For example, in its policy statement "Stopping Unsafe, Fringe Intercity Bus Operators," TTD argues that the highly unregulated industry has resulted in unsafe conditions ("Stopping Unsafe, Fringe Intercity Bus Operators").

To address these issues, TTD calls for more strict enforcement of federal rules that regulate the curbside intercity bus industry. TTD recommends that FMCSA increase the number of inspections and shutdowns of low-cost intercity bus operators that continuously ignore safety standards, evade safety requirements, and operate negligently. TTD urges FMCSA to audit curbside operators to ensure compliance with hours of service rules, drug and alcohol testing requirements, maintenance guidelines, and other safety requirements. TTD also stresses the need for the U.S. Department of Justice (DOJ) monitoring and enforcement of intercity bus activities to ensure that intercity buses meet Americans with Disabilities Act of 1990 (ADA) requirements and provide accessible services to persons with disabilities. To avoid environmental damage and pollution, TTD wants greater Environmental Protection Agency (EPA) oversight of the disposal of waste products by intercity bus companies. Finally, TTD wants large urban governments to follow the lead of the city of Boston, which has consolidated intercity bus operations at an intermodal hub to enhance operational oversight and accountability ("Stopping Unsafe, Fringe Intercity Bus Operators").

Finally, TTD strongly advocates on behalf of legitimate intercity bus carriers that operate safety and responsibly. It argues that lawfully operating intercity bus companies are not able to fairly compete with fringe intercity carriers that undercut market prices by skirting safety practices, ignoring basic operating requirements, and violating federal safety rules and ADA mandates ("Breaking Laws to Provide Cheap Bus Fares"). It has announced support for FMCSA sweeps that have resulted in a number of unsafe carriers being shut down (TTD Supports FMCSA Crack Down on Unsafe Bus Carriers).

10.4 Amalgamated Transit Union

With over 190,000 members, the Amalgamated Transit Union (ATU) is the largest labor representative of transit workers in the United States ("Our Union"). Several ATU chapters represent bus drivers for corporate intercity carriers (e.g., Greyhound and BoltBus).

ATU recognizes the intercity bus industry as a critical component of the U.S. transportation system. Like other organizations, ATU is concerned with the lack of

regulation in the industry and how this may affect both the safety of passengers and bus drivers. ATU is concerned with the proliferation of curbside carriers that use city streets to load and unload passengers rather than use bus terminal buildings. It asserts that curbside practices enable some carriers to dodge random motor vehicle inspections and safety audits because they are not housed in bus depots. ATU notes that small, non-union intercity carriers are promoting a "race to the bottom" in fares, which affects the wages earned by intercity bus drivers. ATU also states that the lack of rule enforcement has contributed a poor safety record for the industry overall ("Over the Road").

As part of its stance on the intercity bus industry, ATU argues that there is a distinct difference between unionized and non-unionized carriers. ATU cites research conducted by Wayne State University in Detroit, Michigan that found unionized carriers to be twice as safe as non-unionized curbside carriers. ATU strives for increased regulation and enforcement, an environment that promotes fair and competitive wages and safer working conditions for drivers especially through the Fair Labor Standards Act (FLSA) of which intercity bus drivers are exempt. ATU remains concerned about bus driver fatigue. It feels this issue has not been addressed adequately and asserts that Moving Ahead for Progress in the 21st Century (MAP-21) does little to address abuse of hours-of-service regulations, which leads to driver fatigue—a leading cause of accidents.

10.5 American Bus Association

The American Bus Association (ABA) is an advocacy organization representing the interests of the motorcoach industry. ABA's mission statement is to advance "North American motorcoach travel to fulfill the transportation and travel needs of the public" ("About Us"). With around 1,000 member companies, ABA represents tour companies and scheduled service bus companies such as Greyhound Lines, Peter Pan Bus Lines, BoltBus, and Megabus. It also represents another 3,000 member companies involved in the travel and tourism industry as well as suppliers of bus products and services ("About Us").

To better understand ABA's perspective on policy issues impacting the curbside intercity bus industry, the Institute for Public Administration (IPA) conducted a phone interview with Senior Vice-President of Government Affairs and Public Policy Clyde Hart. ABA President Peter Pantuso, who presented at IPA's Curbside Intercity Bus Transportation Policy Forum, also provided additional insight.

Overall, ABA supports federal oversight of the curbside intercity bus industry and initiatives to make bus travel safer. ABA is a strong advocate of the USDOT

Motorcoach Safety Plan, reauthorization of the new transportation program, and recent multi-law-enforcement-agency strike force operations to inspect and shut down illegally operating, unsafe motorcoach companies. It supports USDOT grants to enable state and local agencies to increase roadside inspections, conduct safety audits on new carriers, and enhance commercial driver's license (CDL) testing facilities to improve commercial truck and bus safety.

However, ABA contends that these grants and recent surprise bus-inspection strike force operations are not enough. Repeated testimony by ABA to House and Senate Committees has stressed a need for consistent and adequate enforcement of current federal bus-safety regulations. ABA notes that FMCSA needs additional staff, funds, and contractual support to conduct bus inspections. ABA suggests that instead of hiring additional personnel, FMCSA could use third-party contractors for bus inspections, similar to a program administered by the Department of Defense. In addition, while states receive funds under the Motor Carrier Safety Act to inspect commercial motor vehicles, most funding is used to inspect trucks rather than buses (Pantuso *Submitted Testimony* 2011). Specifically, Mr. Hart noted that for every one bus inspection, 24 truck inspections are conducted (Interview with Clyde Hart).

Concerning safety, Mr. Hart noted that ABA only interacts with motor carriers that are in good standing with the FMCSA and that companies are asked to leave ABA if they do not meet current safety regulations. ABA reviews its membership ranks every 90 days and removes member companies that have obtained an "unsatisfactory" score within the FMCSA's SAFER system database. Companies that obtain a "conditional" score are given 180 days to bring the scores up to "satisfactory" or are also subject to ABA membership removal (*ABA Supports Bus Safety Enforcement Actions*). As such, ABA is unable to interact with many of the Chinatown curbside intercity bus carriers (Interview with Clyde Hart). For example, of the 26 bus companies shut down by FMCSA on May 31, 2012, none were ABA members (Pantuso). ABA supports the curbside intercity bus industry and supports regulatory and enforcement measures that will allow the industry to operate in a safe, efficient, and effective manner.

Mr. Hart also noted that a major concern of ABA is the lenient process to become a passenger carrier operator and obtain a CDL to operate a bus. Currently, to obtain authority to operate, prospective companies need only pay an application fee, provide proof of insurance, obtain an agent, and indicate a willingness to comply with ADA requirements. Prospective CDL operators are not required by states to undergo background checks that would verify information required under the federal code of regulations (ABA's testimony to Senate Commerce Committee, 2011).

Another issue of concern with the regulatory environment is the "piecemeal" nature of rulemaking, which makes it difficult for motor carriers to plan their operations and purchases of new buses. Federal rulemaking and notices, interim rulemaking, and regulatory guidance are issued on a fragmented basis to address specific safety concerns. Because motorcoaches are a major capital investment—\$500,000 each, with lifespans of about 25 years—piecemeal rulemaking regarding motor carrier equipment and manufacturing standards poses financial hardships on small, independent business operators. In addition, requiring equipment changes to address a specific safety issue (e.g., roof crush strength, advanced window glazing, emergency egress, fire detection, electronic on-board recorders, and ADA accessibility) may impact the design or modification of other safety-related bus equipment standards (Interview with Clyde Hart). To address this issue, ABA stresses the need for uniformity and concurrency in rulemaking. It has also suggested that the federal government provide funding assistance to respond to continuing federal bus safety directives, revitalize the motorcoach fleet industry, and address proposed federal and congressional mandates to redesign motorcoaches with electronic stability control, seat belts, and fire suppression systems (Pantuso Testimony 2011).

ABA notes that while many motorcoach companies are privately owned, and offer comparable transit services to that of publicly funded companies, member companies do not receive federal funding assistance. In addition to advocating for federal capital investment assistance for vehicle and equipment safety enhancements, ABA has urged tolling reforms on federally funded highways. ABA contends that private motorcoach vehicles should receive the same toll exemptions or variable pricing charges as publicly funded transit buses (Interview with Clyde Hart).

In addition, ABA asserts that private bus companies should be entitled to use and be involved in the planning process for intermodal facilities that are funded with federal dollars (ABA testimony to House Transportation and Infrastructure Committee, ABA Policy Papers, National Planning). ABA has also asked its members to help in reporting unsafe bus operators and has commended the FMCSA's crackdowns, which have netted a high number of unsafe operators.

11. Summary: Curbside Intercity Bus Transportation Policy Forum

To facilitate discussion on transportation policy issues related to the industry, the Institute for Public Administration (IPA) at the University of Delaware hosted the Curbside Intercity Bus Transportation Policy Forum at the Perkins Student Center on Wednesday, June 13, 2012. Appendix H provides a detailed summary of the forum proceedings and the specific questions asked by forum participants to speakers. A link to the policy forum's webpage may be found at www.ipa.udel.edu/transportation/intercitybus/index.html.

In addition to facilitating discussion on policy issues facing this industry, the purpose of the forum was to explore practices to manage this industry and exchange knowledge among various industry stakeholders. During the course of IPA's research on this subject, several policy issues were identified—including safety, Americans with Disabilities Act of 1990 (ADA) compliance, inter-jurisdictional coordination, the effect of rogue carriers on the industry, curbside conditions and management, intermodal connectivity, concurrency of rulemaking, levels of regulation, and consistency of enforcement.

Frank Ross of the Federal Motor Carrier Safety Administration (FMCSA)

described federal strategies to ensure safe operations of intercity curbside buses. Mr. Ross explained the agency's efforts are focused around three core principles: 1) raising the bar for entering the industry, 2) holding motor carriers and drivers to the highest level of safety standards, and 3) removing all unsafe operators. In the near future FMCSA plans to address the problem of reincarnated carriers by creating a single national continuing liability standard that will tie shutdown carriers to their operating successors. It was noted that rules must be created that will raise the penalty for operating without authority to match the current penalty exacted on household goods carriers. He also mentioned a recent National Transportation Safety Board (NTSB) motor-carrier-accident final report that includes recommendations to require a tenured ten-year driving history, use the Compliance Safety and Accountability program to determine each carrier's fitness to operate, and require a full safety review before a carrier's operations begin.

President and CEO of the American Bus Association (ABA) Peter Pantuso provided industry perspectives on the curbside bus industry and explained ABA's support for more effective bus safety regulation and, particularly, enforcement. ABA supports more FMCSA funding to make enforcement more consistent and suggests hiring a third party for inspections, similar to those of the Department of Defense. ABA

urges that buses placed out-of-service should be booted or locked up, to prevent the reincarnation of bus companies under another name. The ABA also backs a federal-style license similar to that required of pilots by the Federal Aviation Administration. Regarding rulemaking, the ABA supports seat belts, and electronic on-board recorders, which they believe will practically eliminate the falsification of records.

Transportation officials in the Northeast Corridor discussed new solutions to managing intercity curbside bus operations. The panel discussion featured transportation officials from major metropolitan areas. Representatives included Washington, D.C. Union Station Redevelopment Corporation (USRC) Vice President Nzinga Baker, City of Philadelphia Director of Policy and Planning Stephen Buckley, New York City Department of Transportation (NYCDOT) Assistant Commissioner Tom Maguire, District of Columbia Department of Transportation (DDOT) Statewide and Regional Planning Manager Eulois Cleckley, and Port Authority of New York and New Jersey (PANYNJ) Supervisor of Transportation Jay Shuffield.

It was noted that while most metropolitan areas are experiencing pressures to manage curbside bus operations, each location has a unique set of challenges. Much discussion focused on regulations and policies, including the practice of charging curbside buses carriers for the use of transportation facilities. USRC has created a per-slip fee of \$2,500 per month that is designed to recoup costs of operating and maintaining the bus deck. A portion of passenger ticket costs (\$0.75 per trip) is allocated towards onsite amenities and capital improvement costs. The City of Philadelphia has removed metered parking spots and has recouped lost revenue by charging bus operators for the use of dedicated spaces. DDOT has instituted a permitting process that charges bus companies for the use of curbside space and regulates curbside locations through a committee review process. While NYCDOT currently has a lack of sufficient regulatory control over intercity curbside bus operations, state legislation will provide the city with stronger control over intercity curbside bus operations—including permitting, evaluation of curbside locations, and parking enforcement. PANYNJ operates as a financially self-sufficient agency. PANYNJ supports Port Authority Bus Terminal operations through a combination of fees paid by the bus companies as well as crosssubsidies from toll revenue, but must contend with space restrictions, capital funding constraints, and increased competition for limited space in Midtown Manhattan.

Finally, **forum participants engaged in a roundtable discussion** on curbside bus transportation policy issues. Participants discussed the recent crackdown against unsafe and unethical operators, need for concurrency in federal rulemaking, competition among bus carriers and rail, and impacts of state and local government attempts to regulate and manage curbside operations.

Specific discussion focused on:

- Impact of industry deregulation;
- Issues regarding reincarnated or rogue carriers;
- Concern that smaller motorcoach carriers subjected to stricter safety regulations may be financially burdened;
- Need for cities to focus on how to equitably accommodate intercity bus operations rather than focus on revenue generation;
- Impact of shifting from curbside use to an intermodal facility on the business model of the intercity bus operators;
- Need for intercity bus operators to pay their fair share for use of limited curbside space, loading zones, loss of parking meter revenue, intermodal facilities; and
- Customer interests in intermodal connectivity.

12. Conclusion

There has been a substantial effort to improve industry safety through rulemaking, legislation, policymaking, adoption of regulatory guidelines, and management approaches. Yet, a host of transportation policy opportunities and challenges remain. Additional research, policy analysis, public engagement and outreach, and policy forums are needed to understand evolving issues and shape a comprehensive research agenda. Future topics of research may include intergovernmental coordination on industry transportation policy issues, formulating strategies to regulate and manage curbside operations, understanding the curbside intercity bus business model to identify anomalies that may point to illicit activities, studying financial and economic development impacts of the industry, studying principles for sustainable development of intermodal transportation hubs that include intercity buses.

12.1 Sustaining the Growth and Resiliency of the Industry

Effectiveness of policies and regulations are dependent on sufficient federal funding and resources, multi-jurisdictional coordination, effective enforcement of safety regulations, and consumer/stakeholder outreach and education. The July 2012 adoption of the two-year transportation reauthorization bill, Moving Ahead for Progress in the 21st Century (MAP-21)—particularly the Commercial Motor Vehicle Safety Act of 2012—establishes a strategic framework to improve the regulatory environment, provide a program of continuous improvement, and authorize greater rulemaking and enforcement authority of Federal Motor Carrier Safety Administration (FMCSA).

Policymaking needs to be comprehensive, strategic, outcome oriented, in tune with concerns for safety, security, and fair competition. Federal transportation programs need to provide resources/funding to ensure effective oversight and enforcement and to address the need for investment in intermodal transportation infrastructure and facilities.

At the same time, a balance between government regulation and a climate of good corporate social-responsibility needs to be fostered. In their book *That Used to Be Us,* Friedman and Mandelbaum assert that,

Markets are not just wild gardens that can be left untended. They need to be shaped by regulations that promote risk-taking but prevent recklessness on a scale that can harm everyone. The need for regulations arises from an unavoidable feature of any free-market economy, one that economists call

'externalities.' These are the costs of free-market activities that are not captured by prices, for which, therefore, nobody pays, and that can injure the society as a whole. To correct this market failure, government has to step in to make sure that something closer to the full costs of the activity do somehow get paid (Friedman and Mandelbaum, 2011).

Michael Porter and Mark Kramer also suggest, in their award-winning Harvard Business Review article, "Creating Shared Value," that it is possible to strike a balance between government regulation and corporate social responsibility. Regulations that enhance shared values have clear and measurable goals, set performance standards, define phase-in periods for achieving performance standards, and provide performance benchmarks (Porter and Kramer, 2011, 13). The authors state,

...Regulation will be needed to limit the pursuit of exploitative, unfair, or deceptive practices in which companies benefit at the expense of society...(13). ...The right kind of government regulation can encourage companies to pursue shared value; the wrong kind works against it and even makes tradeoffs between economic and social goals inevitable (Porter and Kramer, 2011, 14).

Outreach to consumers and among stakeholders is essential. While online consumer information and the *SaferBus* app are steps in the right direction, the average consumer may not even be aware of the need to check on bus company safety records prior to booking a trip. Industry stakeholders should regularly convene to understand the array of issues stemming from industry growth, address how to balance regulation vs. free-market competition, and devise "win-win" strategies to keep this industry—and their arrival/departure destinations—sustainable and resilient.

State and local governments also need to engage stakeholders and industry experts to develop innovative approaches to manage curbside operations. New approaches to meet growing demand for service and manage curbside intercity bus operations may include permitting systems, idling laws, regulating curbside conditions, leasing or privatizing curb rights, and consolidating and/or centralizing bus operations in intermodal facilities.

To ensure the sustained growth and resiliency of this mode of transportation, issues stemming from deregulation of the industry, its unprecedented growth, and the fragmented regulatory environment must be addressed. Recent high-profile motorcoach crashes have spotlighted the need for a stricter regulatory environment to protect passengers; ensure the safety fitness of new drivers; improve vehicle integrity and maintenance; and targeted enforcement strategies. In addition to safety, other noted issues of concern include compliance with the Americans with Disabilities Act of

1990 (ADA), management of curbside conditions, enforcement challenges, lack of transparency of ticket brokers, and evasive business practices of chameleon carriers. Transportation policy opportunities and challenges that were described in this report are summarized below.

12.2 Challenges and Opportunities

Enforcement

- Various federal, state, and local enforcement agencies share responsibility for
 ensuring motorcoach safety enforcement and compliance. Because law
 enforcement agencies are expected to address a multitude of public safety
 concerns with limited resources, coordination of and funding support for
 enforcement activities is paramount.
- While the curbside intercity bus industry is growing, the number of state
 inspectors and federal safety investigators qualified to perform inspections and
 compliance reviews has not kept pace with industry growth. There is a concern
 that there are not enough certified federal and state inspectors and investigators
 to keep up with workload.
- All commercial vehicle companies that are authorized to operate across state lines are subject to periodic safety inspections. However, only a small percentage of bus and truck companies actually received a "compliance review," which leads to a United States Department of Transportation (USDOT) safety rating.
- Curbside intercity buses complicate the feasibility of safety inspections. Because curbside carriers generally do not operate out of a bus terminal or intermodal facility, it is not practical to conduct inspections at transient curbside locations. In addition, while roadside inspections could help ensure that motor carriers are following safety rules, enforcement officials are prohibited by law against conducting en-route safety inspections of motorcoaches (including curbside intercity buses) while carrying passengers.
- States have the primary responsibility for safety compliance review and
 inspections of driver safety records, logbooks, driver qualifications, and vehicle
 condition of motor carriers. While FMCSA provides financial assistance to
 states via the Motor Carrier Safety Assistance Program to conduct safety
 inspections, a majority of funding is allocated toward truck inspections.
- Business licenses are not difficult to acquire and need not be for motorcoach operations. Bus companies with safety violations may cheaply re-license their operations within another state under another company name or with one that

- shares ownership and/or an affiliation, in order to avoid enforcement action. Because business licensing at the state or local level is not often crosschecked with USDOT interstate operating authority numbers, many bus companies with unethical business practices simply avoid enforcement.
- As the Double Happyness, Inc. case study illustrated, because various levels of
 government separately administer business and licensing requirements of
 motorcoach carriers, there may be inconsistencies of the business license
 addresses of small, private curbside bus companies. It may be difficult to verify
 the corporate address, USDOT registration address, insurance company, and the
 "official address of record" versus the local business address of a bus company.
- Also, as seen with the case of Double Happyness, Inc., it may be difficult to assess whether a new company is indeed a "closely related affiliate" of a shuttered company.
- Oversight of bus or motorcoach ticket brokers is difficult. Bus brokers serve as intermediaries by selling tickets online and arranging transportation between motor carriers and passengers for a fee. Bus brokers are not required to register with USDOT or obtain operating authority from FMCSA.
- Customers may be unaware that ticket brokers do not provide information about a particular motorcoach company's safety rating, safety history, and insurance status for which they are selling tickets. They have been known to sell tickets for travel on bus carriers that have been subject to safety compliance issues and violations.
- Commercial driver's license (CDL) operators are not required by states to undergo background checks that would verify information required under the federal code of regulations.
- FMCSA announced in May 2013 a notice of proposed rulemaking (NPRM) to allow state and federal enforcement officers to share and view current information regarding a commercial motor vehicle (CMV) driver's medical certification status.

Funding/Resource Allocation

- While buses carry more passengers per year than airlines, federal funding for bus security amounts to a fraction of the federal funding allocated to security initiatives for the passenger airline industry.
- Most states allocate federal share of motor carrier enforcement funding to inspection of trucks rather than buses.

- The majority of curbside intercity bus companies are small enterprises, lack federal subsidies, are unable to share transit facilities that are supported by federal dollars, and must compete in the free market to remain profitable. In contrast, Amtrak is heavily subsidized and depends on federal funding to support both operating and capital costs. Unless all surface transportation modes receive equal access to federal subsidies, or passenger rail subsidies are eliminated, the curbside intercity bus (and the motorcoach industry as a whole) will have a competitive disadvantage among transportation modes.
- While major transportation facilities receive federal and/or state funding, most are not designed nor do they accommodate all modes of transportation.
 Transportation facilities funded with public investments should serve as intermodal facilities that provide linkages and connections to all modes of transportation. Appropriate funding to intermodal facilities—that include the curbside intercity bus industry—can help sustain the resiliency and continued growth of this mode of transportation.
- FMCSA authorization levels and grants program funding under MAP-21 have not grown. Funding remains flat from previous levels for the Motor Carrier Safety Assistance Program, CDL Program Implementation Grants, Commercial Vehicle Information Systems and Networks Grants, New Entrant Audit program grants. While funding has not increased, FMCSA is directed to issue a large number of rulemakings, reports, and programmatic changes in a compressed time period that are in addition to 2012 safety mandates (FMCSA Office of Research and Information Technology).
- Over-the-Road Bus Accessibility Transportation Program Grants are eliminated under MAP-21. This grant made funds available to private operators (including curbside operators) for training and capital costs associated with compliance of DOT rules to make buses fully accessible.
- Despite TSA and industry calls to bolster surface transportation security funding for buses, the Obama administration terminated the DHS Intercity Bus Security Grant Program for Fiscal Year (FY) 2012.
- Industry advocates assert that FMCSA needs additional staff, funds, and contractual support to conduct bus inspections. American Bus Association (ABA) suggests that instead of hiring additional personnel, FMCSA could use third-party contractors for bus inspections, similar to a program administered by the Department of Defense.
- Industry advocates (e.g., ABA) assert that private bus companies should be entitled to use and be involved in the planning process for intermodal facilities that are funded with federal dollars.

 Public-private partnerships show promise to target investments to intermodal transportation centers with transit-oriented development. Washington D.C.'s Union Station is becoming a premier transit center through an infusion of funding and investment from the federal and D.C government, Union Station Redevelopment Corporation, Amtrak, and private developers.

Public Engagement and Outreach

- While information is available regarding federal agency regulatory guidelines and rules, it is difficult to navigate the trail of proposed, interim, and final rules.
- There is not one "go-to" federal website that provides current information—by type of commercial vehicle—that summarizes *all* federal agency regulatory requirements governing safe, secure, and accessible motorcoach operations.
- FMCSA has established an extensive outreach and engagement agenda with
 motorcoach industry stakeholders, enforcement officials, transportation
 professional, and state- and local-government leaders. The agency hosts
 "listening sessions," public hearings, participates in forums/conferences,
 submits testimony before Congressional subcommittees on rulemaking, and has
 established advisory subcommittees to consider diverse perspectives on issues
 and policy development.
- FMCSA's outreach and engagement program is designed to help employers, drivers, brokers, and operators become more familiar with issues affecting the commercial motor vehicle industry. Much of the information pertains to FMCSA's rulemaking, registration and licensing, and safety and security initiatives.
- FMCSA's website contains passenger carrier safety information for bus passengers—including safety ratings and violation of histories for individual carriers. However, there is no comprehensive list/description of federal regulations that govern each type of passenger vehicle—a series of lists must be accessed to glean this information.
- FMCSA's "SaferBus" app enables consumers to access a bus company's safety performance record, affirm a company's operating authority and insurance status, and file a complaint (FMCSA.com). While the SaferBus app is an excellent resource, it is not clear how the new app is being marketed to the general public, if press releases about the app have been issued to partner agencies and stakeholder organizations, and/or whether these partner agencies/stakeholders provide links to FMCSA's SaferBus mobile app webpage. Also, the SaferBus app does not make a clear distinction that bus brokers are different from bus carriers.

- Most consumers are uninformed that motorcoach carriers must comply with
 safety regulations and that they should review a motorcoach company's safety
 record before booking a trip. While ABA and FMCSA offer passenger safety
 information (e.g., *SaferBus* app) and advice for prospective bus passengers, the
 average consumer may not be aware that this information exists.
- Unless there is a federal requirement for online ticket brokers to disclose the names of bus companies that they represent, consumers will be unable to determine whether they have purchased a ticket from an unsafe operator.
- State and local governments have the opportunity to provide comprehensive information on federal and state laws governing motor carriers safety. The Maryland Department of Transportation provides an online Maryland Motor Carrier Portal, a link to FMCSA's federal motor carrier safety regulations, and a downloadable 2012 *Maryland Motor Carrier Handbook* with details on federal and state laws (www.mdot.maryland.gov). New York City Council recently passed a local law, to amend the Administrative Code of the City of New York, to require the New York City Department of Transportation (NYCDOT) to post a link on its website concerning passenger carrier safety ratings (NYC.gov).

Interjurisdictional Coordination

- Public-private partnerships need to be forged to cooperatively assess the need to plan for new or upgrade existing curbside locations, consider investments for multi-modal facilities that meet the needs of all stakeholders, and develop a framework to ensure high levels of safety and security.
- Creating a data sharing agreement between curbside intercity carriers, and state
 and local governments would better inform relevant transportation planning
 initiatives, development of local policies to manage impacts of bus operations,
 need for safety and security measures, and capital planning for transportation
 infrastructure improvements.
- Curbside intercity bus stop locations need to incorporate design principles for on-street transit stops as identified by the American Public Transportation Association.
- Lines of communication need to be strengthened among local, state, and federal
 agencies that are involved in granting operating authority and business licenses
 to bus companies. State and local government officials need to be apprised of
 FMCSA enforcement action taken against bus companies to make informed
 business-licensing decisions and/or take other regulatory action.

- InsideFMCSA.com, an "independent and non-biased resource," issues an online subscription-based news service to provide information on regulatory and legislative issues affecting the transportation industry (insidefmcsa.com).
- Business licenses are not difficult to acquire at the state or local level and may be issued to motor carrier operators regardless of their safety records. In addition, it is difficult to determine familial ties to another company that may have been issued an out of service (OOS) order.
- CDL-issuing entities are usually state insurance or licensing agencies.
 Therefore, Motor Carrier Safety Assistance Program (MCSAP) grantees may not have authority over CDL training. States need to ensure that laws and entry-level driver training (ELDT) are compatible to federal ELDT rules for intrastate commerce.
- While a FMCSA rule will standardize state requirements to obtain a commercial driver's license, it will not be retroactively applied to drivers with existing CDLs.
- On-street (or curbside) bus stops are located within public street rights-of-way.
 Because multiple entities may share responsibility for the design, repair,
 maintenance, or capital improvement of a public right-of-way, capital
 improvements to a curbside location are subject to public funding rather than
 private investment by curbside intercity bus companies.
- The Motor Carrier Safety Advisory Committee (MCSAC) is comprised of motor carrier safety advocacy, safety enforcement, labor, and industry stakeholders. It meets periodically to provide information, input, and recommendations to FMCSA on safety programs and regulations for commercial trucks and buses. While this committee provides important feedback to FMCSA, transportation policy forums should also be planned to convene a broader group of curbside intercity bus industry stakeholders including policymakers, transportation officials, government leaders, safety oversight investigators and professionals, curbside bus company representatives, industry trade organizations and advocates, insurers, and the private sector (e.g., developers of transit-oriented development) to discuss key issues.
- State and local governments are managing impacts of the curbside intercity bus
 industry through approaches such as privatization of curb rights, curbside
 permitting systems, enforcement activities, and planning and development of
 intermodal facilities. Continued discourse among state and local government
 transportation officials, like the November 2011 National Association of City
 Transportation Officials (NACTO) Workshop on Managing Intercity Bus
 Operations, is optimal.

• The Zalewski, Buckley, and Weinberger study recommends two approaches to help cities deal holistically with congestion, competition for limited curb space, reduced mobility, and need to balance supply and demand. A framework model is suggested to change existing practices and provide a rational and comprehensive planning approach to manage all curbside space in a specific area. An innovative performance-pricing model, which uses market pricing to manage the supply of curb parking, is also suggested.

Safety and Security

- The field observations, performed by the Institute for Public Administration (IPA), of curbside arrival and departure sites noted the lack of airport-style screening of passengers/baggage prior to boarding, security cameras, and verification of passenger information.
- Federal, state, and local entities need to collectively assess the need for on-site security and protective measures at curbside facilities, and arrival and departure points.
- While buses carry more passengers per year than airlines, federal funding for bus security amounts to a fraction of the federal funding allocated to security initiatives for the passenger airline industry.
- Aviation security has received a higher priority over surface transportation security. While the Transportation Security Administration (TSA) has devoted resources to improve security measures of buses, subways, passenger rail, and buses—funding is skewed towards aviation security.
- Primary responsibility for security of commercial vehicles (including over-theroad buses, or OTRBs), passengers, and baggage/goods transported rests with the private companies rather federal (TSA), state, or local officials. Compliance is voluntary, not mandatory.
- The Department of Homeland Security (DHS), Federal Transit Administration (FTA), and ABA have each issued suggested protection measures, security tips, and/or guidelines that focus on safety and security of bus facilities, drivers, and equipment. However, most "best practices" for safe and secure facilities are geared towards public mass-transit and passenger-rail systems that utilize transit stations, not private bus carriers using curbside locations.
- Opponents of tighter bus security claim that the nature of curbside intercity bus operations makes implementation of airport-like security measures (e.g., airport-style metal detectors and individual baggage screening) impractical and extremely difficult.

- Additional research is needed to understand the business model of curbside intercity bus companies to identify industry anomalies of unethical carriers that operate outside industry norms. Understanding the business model can help regulators detect motorcoach operators that are illegally transporting goods, passengers, and/or conducting clandestine activities.
- Funding for improving bus security is problematic; the Obama administration terminated the DHS Intercity Bus Security Grant Program for FY 2012.

Transportation Accessibility and ADA Compliance

- Perhaps because the curbside intercity bus business model shuns the use of, and investments in, facilities to reduce overhead costs and keep prices low, access to curbside locations seems to be of minor concern. Most curbside intercity busstop locations seem to ignore the ideal design principles recommended by the American Public Transportation Association (APTA) for on-street transit stops.
- Some smaller, non-corporate and independent Chinatown bus operators have had poor safety compliance records and history of ADA compliance violations. Instances of ADA violations include refusal of transportation services, denial of equal access to transportation, lack of accommodation to transportation with service animals, denial of equal access to seating to those in a wheelchair, and lack of provision of accessible buses. While the OTRB Transportation Accessibility program provided discretionary awards to assist with ADA compliance, it was repealed under MAP-21.
- Curbside intercity buses present a complication to the general application of ADA regulations to transportation. While large OTRB operators are required to have accessible fleets, small curbside operators are required to provide "equivalent services" and be "willing and able" to transport individuals with disabilities.

Rulemaking

- Rule changes have frequently been subject of legal challenges by industry
 activists who submit legal challenges, testify before Congressional
 subcommittees, and/or request Congressional intervention on rulemaking.
- Policymakers have challenged whether some agency "guidance" needs to be subject to formal rulemaking.
- Rulemaking is often bogged down by extensive research on issues, unrealistic timeframe mandates, the need to affirm cost-benefits of outcomes, and the need to gain input from diverse industry groups.

The costs vs. the benefits of rulemaking are questionable. For example, MAP-21 compels rulemaking to meet requirements relating to entry-level driver training (ELDT). However, public comment on the 2007 notice of proposed rulemaking (NPRM) that addressed ELDT notes that annual costs are high relative to little or unknown quantitative safety benefits. "Costs of proposed ELDT would be approximately \$176.4 million per year. Crash reduction resulting from ELDT would have to be approximately 20 percent for the benefits to equal the rule's costs" (Motor Carrier Safety Advisory Committee).

Balancing Government Regulation and Free-Market Economy

- Proponents of stricter regulations argue that proliferation and success of newer corporate models is proof that the curbside intercity bus industry can operate prudently and safely with government oversight and a stronger regulatory environment.
- There is a debate as to whether government or private industry should be responsible for developing the curriculum to train and educate commercial motor vehicle drivers.
- Opponents of stricter regulations believe that excessive government regulations are costly and that the majority of small, non-corporate businesses cannot compete equitably in the marketplace.
- Industry advocates contend that the rail industry receives government subsidies that place the motorcoach industry at a distinct competitive disadvantage.
- Small businesses, particularly smaller independent motorcoach operators, express concerns that costs of regulatory mandates will overburden their operation and affect their bottom line and ability to compete.
- Government interventionists point to the lack of regulation and industry safety oversight as the cause of horrific motor carrier crashes in recent years.
- Rulemaking and legislation should be performance based; reasonable timelines, performance objectives, public safety benefits, and benchmarks for compliance should be prescribed.
- There is a need to understand the curbside-intercity-bus business model to better detect business irregularities of companies that operate under the radar and may be using the business as a guise for other covert activities.

Title II of MAP-21

- Title II of the Commercial Motor Vehicle Safety Enhancement Act of 2012, within MAP-21, provides FMCSA with greater authority to address safety, compliance, and enforcement issues in the motorcoach industry.
- Fulfillment of MAP-21 directives and FMCSA mandated activities will require strong partnerships with federal, state, and local enforcement agencies, motor carrier industry advocates, labor organizations, and safety-interest groups.
- MAP-21 will require state transportation departments to elevate bus, truck, and
 motorcoach inspection programs, standards, and enforcement efforts. It is not
 clear whether MCSAP funds and inspection resources will be equally allocated
 to all types of commercial motor vehicles, including motorcoach buses.
- As previously discussed, MAP-21 grant funding is flat, the Bus and Bus Facilities
 Discretionary Program has been consolidated into other programs with
 stagnant funding, and Over-the-Road Bus Transportation Accessibility Program
 Grants are eliminated.
- En-route motorcoach inspections continue to be prohibited.
- FMCSA must respond to a large number of rulemakings, reports, and programs within a compressed two-year timeframe.

Social Media

- Industry-advocate organizations, the federal government, and corporate curbside intercity bus carriers have joined the social media bandwagon to provide public information, give timely updates, engage stakeholders (e.g., bus riders), promote awareness of safety programs like the *SaferBus* app.
- While social media is primarily being used to communicate to consumers and other curbside intercity bus stakeholders, the power of social media can also be used to harness critical input and unfiltered customer feedback from bus passengers.
- Social media can also be used to better gauge travel behavior, choices, and preferences of demographic groups—such as the Millennial generation—who are giving up cars in favor of alternative modes of transportation.
- Additional research is needed to help quantify the potential for better coordinating social media with other platforms for providing/obtaining information such as real-time service/emergency alerts, notification of FMCSA cease-and-desist order issuance, and filing consumer complaints.

Economic Development

- ABA regards the curbside industry as an economic engine—specifically with respect to employment within the sector, support for the tourism industry, and benefits to benefits local businesses.
- The Drexel University LeBow College of Business 2012 BoltBus Economic
 Impact Analysis study provides compelling data on the economic benefits of
 curbside intercity bus operations. This mode did generate local employment
 through incremental revenue derived from customer and organizational
 spending.
- Public-private partnerships can foster synergies to plan for interconnectivity among transportation networks, future transit-oriented development, linkages among local transit feeder services, and integration of this mode within intermodal transportation hubs.
- The Union Station Redevelopment Corporation has leveraged public and private investment to transform D.C.'s Union Station into a state-of-the-art transportation hub that links multiple modes of transportation, serves as a tourist attraction, and supports mixed-use development opportunities.

13. Appendices

Appendix A. Select Idling Laws in the Northeast Corridor

Appendix B. Site Visit Reports

Appendix C. Intercity Bus Customer Survey Questions

Appendix D. Timeline of Enforcement Actions—Double Happyness, Inc.

Appendix E. Matrix of MAP-21's Motor Carrier Safety Act of 2012 provisions related to the Curbside Intercity Bus Industry

Appendix F. Delaware Center for Transportation Research Showcase 2012 Poster

Appendix G. Delaware Center for Transportation Research Showcase 2013 Poster

Appendix H. Curbside Intercity Bus Transportation Forum Agenda

Appendix I. Curbside Intercity Bus Transportation Forum Proceedings Summary

Appendix J. Works Cited

Appendix A. Select Idling Laws in the Northeast Corridor

Delaware 3	Maximum Idling Time 3 minutes (15 minutes: 32° to -10° F;	Exemptions - Traffic conditions or mechanical difficulties
(i	15 minutes: 32° to -10° F;	- Traffic conditions or mechanical difficulties
	No limit: Less than -10° F) Fines: \$50 - \$500 per offense (Title 7, Ch. 60, §6005 & §6013)	 Conform to manufacturers specifications Repair Emergency vehicles Using auxiliary equipment/power take off Power during sleeping or resting beyond 25 miles of truck stop with available electrified equipment Vehicle safety inspections
Regulation 45, Excessiv www.awm.delaware.go		ware Division of Air & Waste Management
District of Columbia (3 minutes 5 minutes if less than 32° F) Fines: \$500, doubles for each subsequent violation	Power takeoff
District of Columbia M Health Administration	Municipal Regulations Title 20, 8000,1 Air Quality Division www.dchealth.do	, District of Columbia Department of Health Environmental
Maryland 5 F	5 minutes Fines: Not >\$500 (MC § 27-101(b))	Traffic conditions or mechanical difficulties Heating, cooling or auxiliary equipment Conform to manufacturer's specifications Accomplish intended use
		partment of the Environment , <u>www.mde.state.md.us</u>
F	5 minutes Fines: Not >\$100 — 1st Not >\$500 for each succeeding offense	Being serviced Delivery for which power is needed & alternatives unavailable Associate power needed & alternatives unavailable
General Laws of Massa www.mass.gov/dep	sachusetts Ch. 90: § 16 A. Massachuset	ts Department of Environmental Protection,
New Jersey 3 (c) (c) (c) (d) (d) (d) (d) (d) (d) (e) (e) (e) (e) (f) (e) (f) (f) (e) (f) (f) (f) (f) (f) (f) (f) (f) (f) (f		Traffic conditions Mechanical operations Waiting or being inspected Performing emergency services Being repaired or serviced Auxiliary power unit/generator set, bunk heaters, etc. Sleeper berth with 2007 or newer engine or diesel particulate filter ersey State Department of Environmental Protection, Air
	Regulatory Development, <u>www.state.n</u>	
F N ss (A	5 minutes Fines: Not <\$375 nor >\$15,000 - 1st offense; Not >\$22,500 - 2nd offense & subsequent offenses (NYSCL Ch. 43-B, \$71,2103(1))	Traffic conditions Comply with passenger comfort laws Auxiliary power or maintenance Emergency vehicles Within mines or quarries Parked for more than 2 hrs & less than 25° F State Inspections Recharging hybrid electric vehicles Farm vehicles Electric vehicles 2-3.2. New York State Department of Environmental

Entity	Maximum Idling Time		Exemptions	
New York City	3 minutes (1-minute if adjacent to a public sch Fines: Not <\$50 nor >\$500 and/or days – 1st; Not <\$100 nor >\$1,000	imprisonment for 20	Emergency vehicles Operate loading, unloading or processing device	
	for not >30 days - 2nd offense; Not <\$400 nor >\$5,000 and/or im			
Man Manh City, 4 de	months – 3rd & subsequent offense		mental Bastastian	
www.nvc.gov/dep	ninistrative Code Title 24-163. New York	City Department of Environ	mental Protection,	
New	5 minutes	Traffic conditions		
Rochelle, N.Y.	Fines: Not more than \$50 and/or 15 days imprisonment – 1st offense;	Comply with passenger comfort laws Auxiliary power or maintenance Emergency vehicles		
	Not more than \$100 and/or 45			
	days imprisonment – 2nd offense within 18 months; Not more than	Parked for more than 2 hrs & less than 25° F State Inspections		
	\$250 and/or 90 days	Recharging hybrid electric vehicles		
	imprisonment – 3rd &	Farm vehicles		
	subsequent offenses within 18	Electric vehicles		
	months (CCNR §312-68)			
Code of the City of	New Rochelle, Part II, Ch. 312, Art. II, §3	1 212-33. City of New Rochelle.	Code Enforcement/Abatement.	
www.newrochellen	y.com_		,	
Pennsylvania	5 minutes in any 1 hour period	Traffic conditions		
	(15 min/hr if sampling, weighing,	Prevent safety or health e		
	or loading or unloading) Fines: \$150 - \$300 per offense	Comply with manufactur Emergency or law enforc		
	(plus civil penalties up to \$1000)	Maintenance or repair	ement purposes	
	grant avair permanent up to \$1000)	Government or security i	nspections	
		Power work-related oper		
	l .		auons	
		Mechanical difficulties	auons	
Diesel-Powered Mo	tor Vehicle Idling Act. Department of En	Mechanical difficulties		
www.dep.state.pa.u	ıs/dep/deputate/airwaste/aq	Mechanical difficulties vironmental Protection, Bur		
www.dep.state.pa.u City of	as/dep/deputate/airwaste/aq 2 minutes or 0 minutes for	Mechanical difficulties		
www.dep.state.pa.u	2 minutes or 0 minutes for layovers	Mechanical difficulties vironmental Protection, Bur		
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www.dep.state.pa.u City of	2 minutes or 0 minutes for layovers (5 minutes if less than 32° F) (20 minutes if less than 20° F)	Mechanical difficulties vironmental Protection, Bur		
www.dep.state.pa.t City of Philadelphia	2 minutes or 0 minutes for layovers (5 minutes if less than 32° F) (20 minutes if less than 20° F) Fine: \$300	Mechanical difficulties vironmental Protection, Bur None	eau of Air Quality,	
www.dep.state.pa.t City of Philadelphia	2 minutes or 0 minutes for layovers (5 minutes if less than 32° F) (20 minutes if less than 20° F) Fine: \$300	Mechanical difficulties vironmental Protection, Bur None	eau of Air Quality,	
City of Philadelphia Air Management F www.phila.gov/hea	2 minutes or 0 minutes for layovers (5 minutes if less than 32° F) (20 minutes if less than 20° F) Fine: \$300 (eg. IX §3(A). Philadelphia Department on the minutes for diesel vehicles (3 minutes for all other vehicles) in commercial or residential urban	Mechanical difficulties vironmental Protection, Bur None f Public Health, Air Manager	eau of Air Quality,	
City of Philadelphia Air Management F www.phila.gov/hea	2 minutes or 0 minutes for layovers (5 minutes if less than 32° F) (20 minutes if less than 20° F) Fine: \$300 (eg. IX §3(A). Philadelphia Department of the minutes for diesel vehicles (3 minutes for all other vehicles) in commercial or residential urban areas	Mechanical difficulties vironmental Protection, Bur None f Public Health, Air Manager	eau of Air Quality,	
City of Philadelphia Air Management F www.phila.gov/hea	2 minutes or 0 minutes for layovers (5 minutes if less than 32° F) (20 minutes if less than 20° F) Fine: \$300 (eg. IX §3(A). Philadelphia Department on the minutes for diesel vehicles (3 minutes for all other vehicles) in commercial or residential urban	Mechanical difficulties vironmental Protection, Bur None f Public Health, Air Manager	eau of Air Quality,	

Source: American Transportation Research Institute, Idling Regulations Compendium http://atri-online.org/index.php?option=com_content&view=article&id=164&Itemid=70

Appendix B. Site Visit Reports

Site Visit Report - November 14, 2011

Bus Line: **Double Happyness, Inc.**

Departure City: Wilmington, Del. (4th Street between

Market Street and Shipley Street)

Arrival City: n/a
Additional Stops: n/a

Notes

- Did not ride bus during this site visit. Went to document conditions at station and departure location for the bus.
- The block of 4th Street between Market Street and Shipley Street is an extremely busy section of road. Along with local automobile traffic, there were a considerable number of public transportation (DART) vehicles moving along 4th Street. Several of these buses had a stop located on this block.
- Parked cars and several instances in which passengers were being dropped off via personal automobiles exacerbated the issue of congestion.
- Double Happyness has a storefront at which tickets can be purchased and passengers can sit to wait for the bus. Ticket window also sold beverages and snacks.
- Initially, there was confusion among the passengers about on which side of the street the Double Happyness bus would arrive.
- Bus departure location was adjacent to a small park that did include benches. Passengers did not utilize these facilities.
- A staff member from Double Happyness's storefront assisted passengers with luggage and collected tickets.
- This staff member appeared to speak limited English.
- Driver did not seem to speak English. Communicated with staff member in a language other than English.

Site Visit Report – November 21, 2011

Bus Line: Megabus

Departure City: Washington, D.C. (Union Station)
Arrival City: Philadelphia, Pa. (JFK Boulevard

near 30th Street Station)

Additional Stops: **Baltimore**, **Md**. (White Marsh

Mall Parking Lot)

- The top deck of a parking garage of Union Station serves as berths for intercity bus service. Bus companies observed included Megabus, BoltBus, DC2NY, and Washington Deluxe.
- Lines formed in roped off areas and were labeled by destination. For the 10:15 a.m. bus, the line formed around 10 a.m., after the previous bus to Philadelphia had departed.
- One rider ran up to a bus while it pulled out, and after chiding the girl, the Megabus employee allowed her to board.
- Bus drivers did not take tickets; rather employees stationed at Union Station for Megabus wearing reflective vests took tickets and loaded luggage.
- The bus was not full.
- Bus stopped at White Marsh Mall in a parking lot. I did not see any signs directing customers to the particular parking lot or directing anyone to parking.

- Passengers waiting to board queued up behind a small sign to form a line. Our bus driver, and the bus
 driver from the bus in front of us, took tickets and loaded luggage. Two passengers waited with luggage
 in shopping carts.
- The stop was about a ten-minute break. The stop had no shelter, or bathrooms.
- There was one vendor selling concessions on JFK Boulevard.
- A Megabus employee had a portable, handheld credit card machine on hand to sell tickets.

Site Visit Report – December 16, 2011

Bus Line: **Double Happyness, Inc.**

Departure City: Wilmington, Del. (4th Street

between Market and Shipley Street)

Arrival City: **Philadelphia, Pa.** (JFK Boulevard,

near 30th Street Station)

Additional Stops: n/a

Notes

- Bus was late. We sat with other passengers in the waiting room in the storefront location.
- When the bus was coming, we stood outside on the curb, and had to ask to figure out that the bus was arriving on the other side of the street.
- Woman from ticket window in storefront took tickets and helped load luggage.
- She spoke in a non-English language to the bus driver, who did not even get out before pulling away. The bus driver did not speak at all to passengers at any point in the journey until arrival on 34th street, at which time he yelled, "34, 34!" to indicate we were stopping. We were planning on getting out in Chinatown but weren't sure we were indeed heading there after all and got off in Midtown. There was no signage.
- The bus was not a kneeling bus. The wheelchair harness was duct-taped, and knotted, and did not appear to be functional.
- The bus driver spoke in a language other than English on a headset phone the entire bus ride.

Site Visit Report – December 16, 2011

Bus Line: **BoltBus**

Departure City: New York City, N.Y.

(34th Street, between 8th Avenue

and 9th Avenue)

Arrival City: **Philadelphia**, **Pa.** (JFK Boulevard,

near 30th Street Station)

Additional Stops: Cherry Hill, N.J. (State Route 38

near Cherry Hill Mall)

- Arrived at the departure location (34th Street, between 8th and 9th Avenue) about 20 minutes before departure time. Bus left five minutes later than stated.
- Bus driver was waiting outside of the bus to assist passengers with baggage and to handle tickets.
- Although located in New York City, the departure location was not particularly well lit.
- There were two BoltBus vehicles loading for departure. Each bus had electronic signage denoting its route, but not its departure time.
- Although bus was equipped with Wi-Fi, it was not working during this bus trip.



- Arrival location in Philadelphia was highly congested. Sidewalk was filled with passengers that were boarding and disembarking. Several buses from both BoltBus and Megabus were present at JFK Boulevard, near 30th Street Station.
- Bus arrived 15 minutes later than stated.
- A BoltBus was parked in front of a fire hydrant.

Site Visit Report - December 19, 2011

Bus Line: **BoltBus**

Departure City: New York City, N.Y.

(34th Street, between 8th Avenue and 9th Avenue)

Arrival City: **Philadelphia**, **Pa.** (JFK

Boulevard, near 30th Street

Station)

Additional Stops: n/a



Notes

- Cold day to line up at bus stop. No signage except for the MTA bus lines that also stopped there.
- One sign indicated that bus lanes were photo-enforced.
- BoltBuses had to compete with space used by MTA buses and only one of each could be there at once.
- Long lines formed, and people huddled toward buildings as they waited. There were no roped off areas.
- BoltBus parked in front of fire hydrant on JFK Boulevard and idled in front of the white sign that read "NO IDLING."

Site Visit Report – January 18, 2012

Bus Line: Megabus

Departure City: **Philadelphia**, **Pa.** (JFK

Boulevard, near 30th Street

Station)

Arrival City: **New York City, N.Y.**

(west side of 7th Avenue south

of 28th Street)

Additional Stops: n/a



- Took SEPTA at 6:45 a.m. from Newark, Del., to get to 30th Street Station and walked to the bus stop to catch the bus.
- Traffic in New Jersey delayed the bus en-route to New York.
- Bus was not full.
- Bus arrived to destination 30 minutes late.

Site Visit Report - January 20, 2012

Bus Line: **DC2NY**

Departure City: New York City, N.Y.

(33rd Street and 7th Avenue)

Arrival City: Washington, D.C.

(DuPont Circle)

Additional Stops: n/a

Notes

- DC2NY offered bottled water when taking tickets.
 They only asked my name and then checked to see if it was on the list.
- Upon boarding, the bus driver led a vote on whether we would stop on the trip, and whether we would watch a movie, and then offered the choice of movies between two movies. Our bus voted not to stop and to watch *Midnight in Paris*, which they immediately began showing. The panel above my seat offered an option to increase the volume from a speaker right above my seat to hear the movie better.
- The line formed on the sidewalk and was orderly. There was a small convenience store at the beginning of the line.
- The bus driver answered questions and was very helpful.
- There was no sign denoting the stop as DC2NY.
- The bus was not full.
- Most passengers slept after the movie finished.
- This bus did not also stop at Union Station, but that is an option when booking online.
- At DuPont Circle, the bus stopped at one of the triangular wedges formed by the five or so streets that come together at the circle. There was no seating, lighting, or any other infrastructure. This particular wedge is mostly concrete and doesn't have any buildings immediately adjacent.

Site Visit Report – February 20, 2012

Bus Line: **BoltBus**

Departure City: New York City, N.Y.

(41st Street, between 8th Avenue and 9th Avenue)

Arrival City: **Philadelphia**, **Pa.** (JFK

Boulevard, near 30th Street

Station)

Additional Stops: **Philadelphia**, **Pa.** (6th Street

and Market Street)

- Megabus recently moved its departure location in New York City. The new location, 41st Street between 8th and 9th Avenues, is in close proximity to the Port Authority Bus Terminal. Megabus has used this block to organize departures to various locations. For example, an area was cordoned off for riders waiting for a bus going to Washington, D.C., and another area was dedicated for passengers headed to Albany, N.Y.
- Discussion with passengers indicated that there was some confusion with the new Megabus departure location.

- Although the waiting areas were not sheltered, the bus boarding area was located under a building
 overhang. Discussion with passengers indicated that Megabus employees reorganize the waiting areas
 under the overhang in instances of inclement weather.
- Multiple Megabus personnel were available to direct passengers to their waiting area and to answer questions.
- Megabus provided signage to denote each of the waiting areas. New York City has also installed a sign
 indicating that this location is used for Megabus departures.
- The buses that were boarding/waiting to board were not idling.
- A Wi-Fi signal was available for Megabus users.
- Bus departed 10 minutes late.
- As the bus departed, an introductory/safety video was played. The video encouraged the use of seat belts and also provided instructions on how to open the windows in case of emergency.
- This Megabus was equipped with seat belts. Some passengers used the seat belts, while others did not.
- Bus arrived to destination 24 minutes late.
- Upon arrival at 30th Street Station in Philadelphia, there were too many vehicle parked along JFK Boulevard. Bus was forced to circle the station until cars moved out of the way, further delaying the bus's arrival.

Appendix C. Intercity Bus Customer Survey Questions

Note: "CONDITIONAL" refers to a question that only appears if the respondent answered a previous question in a certain way.

1. Dear Bus Passenger,

The Institute for Public Administration (IPA) at the University of Delaware (UD) is conducting research on long-distance intercity bus service within the Mid-Atlantic region. As part of this study, IPA is conducting an online survey of intercity-bus passengers (e.g., BoltBus, Megabus, AA Bus, GotoBus, etc.).

The purpose of the survey is to assess demand for intercity bus service within the Mid-Atlantic region and obtain information on travelers' experiences with intercity bus travel. We are interested in why you have chosen this mode of transportation, what factors influenced your travel choice, and whether you have experienced any customer-service issues. Participation in the survey is voluntary and poses no risk to you. Results from the survey will be released in summary form only and will contain no references to individual respondents. You can refuse to answer any question or elect not to take survey. Your participation should take only 15 minutes of your time. If you do choose to participate in the survey, please complete the survey within one week of your intercity bus trip.

If you would like more information about this survey, or the intercity-bus project, please contact IPA Associate Policy Scientist Marcia Scott (msscott@udel.edu). For more information on transportation policy research being conducted by UD-IPA, please visit: www.ipa.udel.edu/transportation.

By clicking yes below, I certify that I have read and understand this informed-consent statement. I agree to voluntarily participate in the survey.

- o Yes
- o No
- 2. Please Indicate the Date of This Trip (MM/DD/YYYY)

 Text Response
- 3. How often do you travel by intercity bus?
 - o First Time
 - o Once a Year of Less
 - o Twice a Year of Less
 - o At Least Monthly
 - At Least Weekly
 - o Daily
- 4. What is the purpose of today's trip:
 - Personal trip

- Business-related trip
- 5. Today did you travel:
 - o Alone?
 - o With other travel companion(s)?
- 6. CONDITIONAL: If you are traveling with companions, please indicate the number of companions in each age group:
 - o Children (under the age of 18)

Choices: 1 - 10

Adult (aged 18-65)

Choices: 1 - 10

o Adult (over the age of 65)

Choices: 1 - 10

- 7. CONDITIONAL: If you are traveling with companion(s), does anyone in your party have a disability?
 - o Yes
 - o No
 - o Not Applicable

- 8. CONDITIONAL: If someone in your party has a disability, are his/her needs adequately addressed by the bus service?
 - o Yes
 - o No
- 9. CONDITIONAL: If his/her needs are not adequately addressed, please explain.

Text Response

- 10. If you had not traveled by intercity bus today, which of the travel modes below would you have most likely used (You may choose more than one answer)?
 - Would not have traveled
 - o Car driver
 - o Car passenger
 - o Amtrak
 - Regional rail (Such as MARC, SEPTA or NJ Transit Trains)
 - Airplane
 - Private shuttle bus or limousine service
 - Another bus line
- 11. CONDITIONAL: If you selected "Regional Rail", please provide the name of the regional rail carrier.

Text Response

12. CONDITIONAL: If you selected "another bus line", please provide the name of that bus line.

Text Response

- 13. What is the name of the bus company you chose for your trip today?
 - o BoltBus
 - o Megabus
 - o AA Bus
 - o GotoBus
 - Other
- 14. CONDITIONAL: If you selected "other", please provide the name of the bus company.

Text Response

- 15. For today's trip, how much did each of the following factors affect your choice of bus company?
 - o Cost
 - o Travel destinations
 - Length of travel time
 - o Convenience/ease of travel
 - o Service dependability (on time)
 - Previous experience(s)
 - Location of bus stations (s)
 - o Availability of Wi-Fi
 - o Availability of a Restroom
 - Seating Comfort
 - Accommodations for persons with disabilities
 - Storage of luggage
 - Storage of bicycles
 - Sense of personal safety and security

For each factor choose: Not Important at All, Somewhat Important, Neither Important or Unimportant, Somewhat Important or Very Important

- 16. Are there other factors that you considered when choosing the bus company?
 - o Yes
 - o No
- 17. CONDITIONAL: If yes, please specify these factors.

Text Response

- 18. What other bus companies have you used for long-distance travel between cities in the past (Check all that Apply):
 - o None
 - o BoltBus
 - Megabus
 - o AA Bus
 - o GotoBus
 - Other
- 19. CONDITIONAL: If you selected "Other", please specify the bus company that you have used in the past.

Text Response

- 20. For today's trip, from which city did your bus depart?
 - o Washington, D.C.
 - o Baltimore, Maryland
 - o Wilmington, Delaware
 - o Philadelphia, Pennsylvania
 - o New York City, New York
 - o Boston, Massachusetts
 - o Other
- 21. CONDITIONAL: If you selected "Other", please specify the city from which your bus departed.

Text Response

- 22. For today's trip, what city is your bus's destination?
 - o Washington, D.C.
 - o Baltimore, Maryland
 - o Wilmington, Delaware
 - o Philadelphia, Pennsylvania
 - o New York City, New York
 - o Boston, Massachusetts
 - Other
- 23. CONDITIONAL: If you selected "Other", please specify the city that is your bus's destination.

Text Response

- 24. For today's trip, is the arrival city (for this bus):
 - o Your final destination
 - o A connection point to another destination
- 25. Is there another travel route within the I-95 corridor (between New York City and Washington, D.C.) that is not currently available but you would like to see offered by an intercity-bus company?
 - o Yes
 - o No
- 26. CONDITIONAL: If you answered "Yes", please indicate the cities of origin/destination that you would like to see offered.

Text Response

- 27. For today's trip, how did you get to the bus departure location?
 - o Personal vehicle
 - o Public transportation
 - o Taxi or shuttle
 - o Someone dropped you off
 - Walked
 - o Bicycled
 - o Other
- 28. CONDITIONAL: If you selected "Other", please indicate your method of travel.

 Text Response
- 29. For today's trip, how will you get to your final destination from the bus stop?
 - o Personal vehicle
 - o Public transportation
 - o Taxi or shuttle
 - Someone will pick you up
 - o Walk
 - o Bicycle
 - o Other
- 30. CONDITIONAL: If you selected "Other", please indicate your method of travel.

 Text Response
- 31. Did you purchase your ticket:
 - o Online
 - At a walkup ticket window or vending machine
- 32. If you purchased your ticket online, how easy was it to:
 - o Find travel location(s)?
 - Find route information and length of travel time?
 - Find bus stops within your travel route?
 - Obtain bus schedule information?
 - Make the online purchase transaction?

For each factor choose: No Opinion/Not Applicable, Very Difficult, Difficult, Neither Easy Nor Difficult, Easy, Very Easy

33. From what curbside or bus station location did you depart?

Text Response

- 34. Please rate the condition of this curbside location or bus station departure point in terms of:
 - Convenient parking
 - Convenient drop-off location
 - Covered shelter
 - Lighting
 - Accessibility and ease of boarding
 - Cleanliness
 - Signage indicating boarding area for this specific bus company
 - o Access to a restroom
 - Safety and security
 - A staff member available to answer my questions
 - A buffered area away from pedestrian and automobile traffic

For each factor choose: No Opinion/Not Applicable, Poor, Fair, Neither Good nor Poor, Good, Excellent

- 35. At which curbside or bus station location did you arrive?

 Text Response
- 36. Please rate the condition of this curbside location or bus station arrival point in terms of
 - Convenient parking
 - o Convenient drop-off location
 - Covered shelter
 - Lighting
 - Accessibility and ease of boarding
 - Cleanliness
 - Signage indicating boarding area for this specific bus company
 - o Access to a restroom
 - Safety and security
 - A staff member available to answer my questions
 - A buffered area away from pedestrian and automobile traffic

For each factor choose: No Opinion/Not Applicable, Poor, Fair, Neither Good nor Poor, Good, Excellent

- 37. Please rate the importance of each of these factors:
 - Convenient parking
 - Convenient drop-off location
 - Covered shelter
 - Lighting
 - Accessibility and ease of boarding
 - Cleanliness
 - Signage indicating boarding area for this specific bus company
 - o Access to a restroom
 - Safety and security
 - A staff member available to answer my questions
 - A buffered area away from pedestrian and automobile traffic

For each factor choose: Not a Factor/Not Applicable, Very Unimportant, Unimportant, Neither Important nor Unimportant, Important, Very Important

- 38. Are there other factors that should be considered when evaluating an intercity bus location or station?
 - \circ Yes
 - o No
- 39. CONDITIONAL: If you answered "Yes", please indicate these factors.

 Text Response
- 40. How satisfied are you with:
 - o Value of trip for money?
 - o On-time performance of trip?
 - o Length of travel time?
 - Cleanliness and condition of bus?
 - o Performance of the driver?
 - Bus temperature?
 - Smoothness of bus ride?
 - Bus stations locations
 - o Condition of bus stations
 - On-board amenities (e.g., Wi-Fi, restrooms, seating comfort, accommodations for persons with disabilities, luggage/bicycle storage, sense of personal safety/security)

For each factor chose: No Opinion/Not Applicable, Very Dissatisfied, Dissatisfied, Neither Satisfied nor Dissatisfied, Satisfied, Very Satisfied

- 41. Given your experience with your trip today, will you continue to travel by intercity bus?
 - o Yes
 - o No
- 42. CONDITIONAL: If you selected "No", please explain why you will not continue to travel by intercity bus.

Text Response

- 43. Are you:
 - o Male
 - o Female
- 44. What is your age?
 - o Under the age of 18
 - 0 18 25
 - 0 26 35
 - 0 36 45
 - 0 46 55
 - 0 56 65
 - o 65 or older
 - Prefer not to answer

- 45. What is your employment status?
 - o Full-time employment
 - o Part-time employment
 - Student
 - Unemployed seeking employment
 - Unemployed not seeking employment
 - o Prefer not to answer
- 46. What is your total household income?
 - o Less than \$10,000
 - 0 \$10,000 \$25,000
 - 0 \$26,000 \$40,000
 - o \$41,000 **-** \$55,000
 - o \$56,000 **-** \$70,000
 - 0 \$71,000 \$85,000
 - 0 \$86,000 \$100,000
 - o Over \$100,000
 - o Prefer not to answer
- 47. Which of the following best describes your race?
 - o Black
 - o White
 - o Asian
 - o American Indian/Alaskan native
 - o Hawaiian or Pacific Islander
 - o Hispanic
 - o Mixed
 - o Other
 - o Prefer not to answer

Appendix D. Enforcement Action Timeline – Double Happyness, Inc.

Double Happyness, Inc. Timeline of Enforcement Action			
Date	Source	Headline	Major points
12/29/11	<i>News Journal</i> , Aaron Nathans	"NYC bus service ordered closed: Rules violations prompt order"	Bus still operating; employees unaware
12/29/11	DNAinfo, Patrick Hedlund	"Chinatown Bus Company Shut Down by Feds Over Safety Violations"	Double Happyness owner quoted saying FMCSA "targeting [the carrier] unfairly."
12/29/11	News Journal, Aaron Nathans	"Feds close bus service from Wilmington to NYC"	Shutdown order issued, buses still running, and workers "unaware"
12/29/11	News Journal, Terri Sanginiti, Aaron Nathans	"State police say they'll tow buses from company found violating safety measures"	State police planning to impound any buses they see operating
12/30/11	News Journal, Editorial	" 'Double Happyness' could still pose threat"	Cites safety as an issue that needs to be a priority
12/30/11	News Journal, Aaron Nathans, Terri Sanginiti	"Bus line ordered halted continues Delaware service"	Police aware of the Federal order; looking into ongoing operations
1/4/12	News Journal, Aaron Nathans, Terri Sanginiti	"Troubled bus line sidesteps US closure"	Rented buses taking off from station; tickets no longer sold on gotobus.com
1/6/12	News Journal, Aaron Nathans	"Feds: Troubled bus service can't sell tickets"	USDOT says no tickets can be sold, but unsure about legality of running chartered buses
1/7/12	News Journal, Aaron Nathans	"US toughens rules on bus line"	USDOT says company cannot charter buses or sell tickets
1/15/12	News Journal, Aaron Nathans	"Bus line shutdown fails to slow traffic"	Buses still running; storefront signs reads bus station now
1/26/12	News Journal	"Feds issue restraining order against bus service"	Reported restraining order issued by USDOT, but notes unlikelihood of enforcement
1/27/12	News Journal	"Low-cost bus line bypasses 3 rd federal shutdown order"	Judge from US District Court of PA grants request for USDOT's issuance of restraining order; bus still operates under another name and license
1/30/12	News Journal, Aaron Nathans	"Wilmington officials padlock bus company's door"	Buses finally stopped running
1/30/12	News Journal, editorial	"Better laws can stop rogue bus line"	Highlighted need for laws to enforce federal orders
1/31/12	News Journal	"Rogue bus company closed by city of Wilmington's order"	Licenses and Inspections Commissioner refuses company's attempts to reregister under new name in light of federal orders
2/19/12	News Journal, Aaron Nathans	"More bus service to New York available"	New companies offering bus service between Delaware and New York and New Jersey
6/12/12	News Journal, Aaron Nathans	"City permits new bus service to run at Double Happyness site"	City cannot deny New Everyday Bus Tour, Inc. license without evidence that they are covered by the original shutdown order, despite clear past ties
6/13/12	News Journal, Aaron Nathans	"Feds: Tough to prove bus firms are 'reincarnated'"	Officials cannot prove New Everyday Bus Tour, Inc. is a 'reincarnation" of Double Happyness despite obvious connections

Appendix E. Matrix of MAP-21's Motor Carrier Safety Act of 2012 –Provisions related to Curbside Intercity Bus Industry

Section	Provision	Major Changes Impacting Curbside Intercity Bus Industry
	Su	btitle A—Commercial Motor Vehicle Registration
32101	Registration of motor carriers	Imposes additional motor carrier registration requirements: agreement to comply with federal requirements; disclosure of relationships that include common ownership, management, common control or familial relationships (for past 3 years); establishes a written proficiency exam.
32102	Safety fitness of new operators	Requires new property carrier owner/operators required to undergo safety review within first 12 months, passenger carrier owner/operators within first 120 days.
32103	Reincarnated carriers	Provides conditions under which carrier's registration may be suspended, amended, or revoked. Focuses on determining conditions of common ownership, management, control, or common familial relationships with any other existing carrier/registrant. Effective one year after enactment.
32104	Financial responsibility requirements	Requires DOT Secretary to issue report 6 months after enactment and every 4 years after, on the appropriateness of financial responsibility and bond and insurance requirements. Also requires Secretary to propose regulations to revise requirements as necessary.
32105	USDOT number registration requirement	Requires a USDOT number to operate a CMV in interstate commerce. Authorizes Secretary to withhold or revoke registration for failure to comply with registration regulations. Does not preclude States from issuing a registration number for carriers operating in intrastate commerce.
32106	Registration fee system	Removes existing \$300 cap on Unified Carrier Registration fee
32107	Registration update	Requires change of address and other information to be updated by motor carriers, freight forwarders, and brokers, within 30 days. Passenger carriers must update info quarterly for the first 2 years of registration.
32108	Increased penalties for operating without registration	Increases minimum penalties for not reporting accurate registration info (from \$500 to \$1000); operating without proper registration (from \$2000 to \$10,000 or \$25,000 for passenger transportation), noncompliance while transporting hazmat (from not more than \$20,000 to no less than \$20,000 and not more than \$40,000).

Section	Provision	Major Changes Impacting Curbside Intercity Bus Industry
32109	Revocation of registration for imminent hazard	Amendment authorizes the registration of a motor carrier to be revoked if it is found to be conducting unsafe operation or are an imminent hazard to public health or property.
32110	Revocation of registration and other penalties for failure to respond to subpoena	Increases minimum (to \$1,000) and maximum (to \$10,000) penalties for not responding to a subpoena.
32111	Fleetwide out of service order for operating without required registration	Enables DOT to place entire fleet of motor carriers out of service (OOS) for operating without required registration.
32112	Motor carrier and officer patterns of safety violations	Clarifies the definition of "noncompliance," as it pertains to motor carriers. Expands FMCSA's authority to penalize/suspend or revoke registration of carriers that violate registration requirements, engage in a pattern of noncompliance, and conceal noncompliance.
		Subtitle B—Commercial Motor Vehicle Safety
32202	Canadian safety rating reciprocity	Provides recognition of and application of Canadian motor carrier safety fitness determinations. Authorizes the United States to enter into agreements with Canadian government officials regarding how such determinations are made.
32203	State reporting of foreign commercial driver convictions	Defines "foreign commercial driver." Requires States to report a conviction of a foreign commercial driver to authorized database(s) to include convictions relation to operation of both commercial and noncommercial motor vehicles.
32204	Authority to disqualify foreign commercial drivers	Authorizes foreign commercial drivers to be disqualified if unfit to operate.
32205	Revocation of foreign motor carrier operating authority for failure to pay civil penalties	Adds foreign motor carriers to group of entities subject to revocation of operating authority for not paying civil penalties.

Section	Provision	Major Changes Impacting Curbside Intercity Bus Industry
		Subtitle C—Driver Safety
32301	Hours of service study and electronic logging devices	Requires regulations requiring the use of electronic logging devices to verify hours-of-service compliance by CMV drivers. Defines/ sets requirements and performance and design standards for electronic on-board recorders. Rules to be written in one year, drivers two years to comply.
32302	Driver medical qualifications	Requires establishment of a national registry of medical examiners. Requires states to receive medical certifications electronically within 5 years of enactment.
32303	Commercial driver's license notification system	Establishes new requirements for periodic review of drivers' records by employers, maintenance of records in driver qualification files. Outlines a plan for the development of a national notification system to help employers meet requirements.
32304	Commercial motor vehicle operator training	Requires establishment of minimum entry-level training requirements for CMV operators. Mandates that drivers complete entry-level training in order to receive a CDL.
32305	Commercial driver's license program	Requires states to begin operating CDL information systems and plan to issue guidance on what must be included in the system.
32306	Commercial motor vehicle driver information systems	May require states that wish to apply for grant funds to make all drivers' license status and history records available electronically.
32307	Employer responsibilities	Increases employer responsibility for knowing driver's eligibility status before employment.
		Subtitle D—Safe Roads Act of 2012
32402	National clearinghouse for controlled substance and alcohol test results of commercial motor vehicle operators	Establishes and sets forth guidelines for creating and maintaining a national clearinghouse of CMV drug and alcohol test results; requires development of a secure process for managing information; requires interoperability with existing and new information data systems.
		Subtitle E—Enforcement
32501	Inspection demand and display of credentials	Expands authority to request credentials to "an employee of the recipient of a safety grant" fund.

Section	Provision	Major Changes Impacting Curbside Intercity Bus Industry
32502	Out of service penalty for denial of access to records	Allowing carrier operators to be placed out of service for denying access to requested records.
32503	Penalties for violation of operation out of service (OOS) orders	Provides stiff penalties for motor carriers/employers in violation of the prohibitions on transportation of goods, people, or hazmat or operating under an imminent hazard OOS order.
32504	Impoundment immobilization for imminent hazard	Authorizes vehicle under OOS orders to be seized or taken custody for imminent hazard.
32505	Increased penalties for evasion of regulations	Strengthens enforcement of evasion provisions; increases fines range for violations.
32506	Violations relating to commercial motor vehicle safety regulation and operations	Removes consideration of "ability to pay when civil penalties are assessed.
32508	Disclosure to state and local law enforcement agencies	Allows relevant information to be disclosed to state and local law enforcement agencies
	S	ubtitle F—Compliance, Safety, and Accountability
32601	Motor carrier safety assistance program	Provides program goal of Motor Carrier Safety Assistance Program. Allows FMCSA to "dedicate sufficient funds" and "make targeted investments" to carry out program. Requires states to share inspectors information regarding granting of federal exemptions. Provides revised state maintenance of effort requirements and waivers for financially burdened States.
32602	Performance and registration information systems management	Allows for a process to be established to cancel a MV registration and/or seize registration plates for violation of a OOS order; the process would also establish reinstatement procedures

Section	Provision	Major Changes Impacting Curbside Intercity Bus Industry
32603	Authorization of appropriations	 Authorizes Motor Carrier Safety Grant programs: Commercial driver's license improvement program grants Boarder enforcement grants Performance and registration information system management program grant Commercial vehicle information systems and networks deployment grants Safety data improvement grants Also authorizes funds for high-priority activities such as new entrant audits and outreach & education
32604	Grants for commercial driver's license program implementation	Clarifies eligible use of funding for CDL program grants.
32605	Commercial vehicle information systems and networks (CVISN)	Requires report to Congress on requirements to resume the CVISN
	S	ubtitle G—Motorcoach Enhanced Safety Act of 2012
32703	Regulations for improved occupant protection, passenger evacuation and crash avoidance	Requires safety belts to be installed in motorcoaches within 1 year after enactment of law. Requires (within 2 years of law enactment) regulations to be established for roof strength and crush resistance, anti-ejection safety countermeasures, rollover crash avoidance, and commercial motor vehicle tire pressure monitoring systems. Establishes regulations for new motorcoaches and retrofitting of existing motorcoaches.
32704	Fire prevention and mitigation	Requires research and testing to determine causes and prevention of motorcoach fires. Standards are to be issued within three years.
32705	Occupant protection, collision avoidance, fire causation, etc.	Requires completion of research on interior impact protection; compartmentalization safety countermeasures; and collision avoidance systems. Rulemaking is to be conducted within 2 years after study completion.
32706	Concurrence of research and rulemaking	Authorizes concurrency in research and rulemaking.

Section	Provision	Major Changes Impacting Curbside Intercity Bus Industry	
32707	Improved oversight of motorcoach service providers	Requires a comprehensive approach to conduct safety review of motorcoach service providers, monitor safety performance of motor carriers, update safety fitness rating system, and disclose safety performance ratings.	
32709	Commercial driver's license passenger endorsement	Requires completion of a report to examine the current knowledge/skills requirements for a CDL passenger endorsement, along with recommendations for improvements.	
32710	Safety inspection program for commercial motor vehicles of passengers	Authorizes rulemaking to require states to conduct annual inspections for commercial motor vehicles designed or used to transport passengers.	

Appendix F. Delaware Center for Transportation 2012 **Research Showcase Poster**

Research of Transportation Policy for Low-Cost, Intercity **Express Bus Industry Within the Northeast Corridor**

Principal Investigator: Marcia Scott, IPA Associate Policy Scientist Research Team: Arthur Wicks, III, UD-UTC Graduate Fellow Eileen Collins, IPA Public Administration Fellow

Problem Statement



What defines the industry?

- Provides scheduled service between urban areas Often utilizes curbsides rather than bus
- stations for passenger loading and unloading
- Stops infrequently, focuses on efficiency
- Often provides onboard amenities like Wi-Fi
 Includes the so-called "Chinatown" buses

Problem: While intercity bus is the fastest growing mode of transportation in U.S., it raises a number of policy questions.

- •How are cities managing curbside and congestion issues?
- What measures are being taken to enforce and prevent bus companies from evading existing safety regulations?
- What policies need to be established to ensure fair competition with other modes?
- How can intermodal facilities better accommodate intercity buses?

Research Findings

Opportunities

- Competitive, yield-management pricing model
- •Inexpensive and affordable •Service for a niche transportation market Appeal to younger demographic
- Intermodal coordination
- Economic impact (e.g., tourism)
- Interagency enforcement/strikeforces
 Guidance to address driver safety issues (e.g., health issues, work hours)

- · Fuel price volatility
- •Tolls, permitting and berthing fees
- Leasing of curbside space
 Competition for space in intermodal hubs
- Unsafe, unethical, and transient operators
 Lenient process to become a bus operator
- Financial challenges for small carriers



- Uniformity and concurrency in federal rulemaking
- Regular and more consistent safety enforcement actions
 Sufficient federal funding to support state inspections
- · Fair interstate tolling policies
- Local strategies and policies to address industry growth
- Database on commercial driver records

CASE STUDY Double Happyness Travel, Inc.

The saga involving federal shutdown of "Chinatown bus" in Wilmington, Del.

Date	Wilmington, Del., News Journal headline
Dec. 29, 2011	NYC bus service ordered closed: Rules violations prompt order
Jan. 27, 2012	Low-cost bus line bypasses 3rd federal shutdown order
Jan. 30, 2012	Wilmington officials padlock bus company's door

Double Happyness Travel, Inc., storefront >

- Operated between NYC and Wilmington,
- but licensed in Pennsylvania

 Deemed "imminent hazard" by FMCSA • Continued to operate despite federal court
- order to cease and desist
 Provides an example of "reincarnated" bus companies that change names to avoid penalties for failed inspections
- · Highlights need for inter-jurisdictional cooperation
- Identifies inadequate enforcement authority to shut down "roque" operators

Becomes generic storefront "Bus Stop"





Field Observations

13 Site Visits

to Major Cities in Northeast Corridor

Issues of Concern

- Curb crowding Lack of signage
- Changing locations
- •Idling •Shared space with city buses
- Compliance with ADA
 Proximity to transit
- English proficiency of drivers
 Availability of employees and







< Megabus at White Marsh Mall outside Baltimore

Dare to be first. **NIVERSITY** OF E**LAWAR**E.



This research project is funded by UD-UTC



Appendix G. Delaware Center for Transportation 2013 Research Showcase Poster

Curbside Intercity Bus Industry: Research of Transportation Policy Opportunities and Challenges

Marcia Scott, Principal Investigator

Eileen Collins and Arthur Wicks, III, UD-UTC Graduate Fellows

Curbside Intercity Bus Transportation Policy Forum June 13, 2012



Forum sessions featured discussion leaders from academia, government, and industry. Experts provided their perspectives, roles in addressing policy issues, and vision for the industry. Presenters included:

- Frank Ross, FMCSA "Federal Strategies to Ensure Safe Operations of Intercity Curbside Buses"
- Peter Pantuso, American Bus Association —
 "Intercity Curbside Buses: An Industry Perspective"

A roundtable discussion invited discourse among forum participants and presenters.



A panel discussion on new solutions to managing intercity curbside bus operations included transportation officials who offered their own perspective and took questions from the audience. Officials included:

- Nzinga Baker, Union Station Redevelopment Corporation, Washington, D.C.
- Eulois Cleckley, District Department of Transportation (DOT), Washington, D.C.
- · Tom Maguire, New York City DOT
- · Stephen Buckley, City of Philadelphia
- Jay Shuffield, Port Authority of New York and New Jersey

Curbside Intercity Bus Industry: Research of Transportation Policy Opportunities and Challenges



Outcomes from this research support the idea that the industry has the potential to expand low-cost travel options, reduce vehicle-miles-traveled (VMT), and decrease congestion in the nation's most traveled transportation corridor—the Northeast Corridor. However, despite passage of the Commercial Motor Vehicle Safety Act of 2012 within the Moving Ahead for Progress in the 21st Century Act (MAP-21), transportation policy challenges remain. Issues that need to be addressed include safety of "chameleon" carriers, need for greater enforcement authority of the Federal Motor Carrier Safety Administration, focus on security of curbside operations, enforcement of Americans with Disabilities Act requirements, management of curbside operations by cities, and need for interconnectivity with other modes of transportation.

The report provides a snapshot of the current, but evolving state of the curbside intercity bus industry. It provides a starting point for further discourse, research, and study of transportation policy as the industry continues to change and expand.







Appendix H. Curbside Intercity Bus Transportation Policy Forum Agenda

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The University of Delaware's Institute for Public Administration (IPA) addresses the policy, planning, and management needs of its partners through the integration of applied research, professional development, and the education of tomorrow's leaders.

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Curbside Intercity Bus Transportation Policy Forum



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Institute for Public Administration School of Public Policy & Administration College of Arts & Sciences





Curbside Intercity Bus Transportation Policy Forum

June 13, 2012 • Perkins Student Center • University of Delaware

AGENDA

8:00 - 8:30 a.m.

Registration and Continental Breakfast

8:30 - 8:45 a.m

Introduction

Marcia Scott, Associate Policy Scientist, Institute for Public Administration (IPA), University of Delaware (UD), Newark, Del.

Eileen Collins, Public Administration Fellow, IPA, UD, Newark, Del.

Arthur Wicks, UD-University Transportation Center Graduate Fellow, IPA, UD, Newark, Del.

8:45 - 9:05 a.m.

Growth of the Intercity Curbside Industry as a Travel

Nicholas Klein, Ph.D. Student, Edward J. Bloustein School of Planning and Public Policy, Rutgers University, New Brunswick, N.J.

9:05 - 9:20 a.m.

Federal Strategies to Ensure Safe Operations of Intercity Curbside Buses

Frank Ross, Federal Program Specialist, Federal Motor Carrier Safety Administration, Dept. of Transportation, King of Prussia, Pa.

9:20 - 9:40 a.m.

Intercity Curbside Buses: An Industry Perspective

Peter Pantuso, President and CEO, American Bus Association, Washington, D.C.

9:40 - 10:35 a.m.

Panel Discussion: New Solutions to Managing Intercity, Curbside Bus Operations

Nzinga Baker, Vice President, Union Station Redevelopment Corporation, Washington, D.C.

Steven Buckley, Director of Policy and Planning, Office of the Deputy Mayor for Transportation and Utilities, Philadelphia, Pa. Eulois Cleckley, Manager, Statewide and Regional Planning

Branch, Transportation Policy & Planning Administration, District Department of Transportation, Washington, D.C. Jay Shuffield, Supervisor of Transportation Planning, Port

Authority of New York and New Jersey, New York, N.Y. **Tom Maguire**, Assistant Commissioner, New York City Department of Transportation, New York, N.Y.

10:35 - 10:45 a.m.

Break

10:45 - 11:25 a.m

Roundtable Discussion All Participants

11:25 - 11:30 a.m.

Closing Remarks

Appendix I. Curbside Intercity Bus Transportation Policy Forum Proceedings Summary

Curbside Intercity Bus Transportation Policy Forum

Summary of Proceedings

June 13, 2012

Event supported by the

University of Delaware University Transportation Center (UD-UTC)

Written by

Marcia Scott, Arthur Wicks, III, and Eileen Collins



Institute for Public Administration

School of Public Policy & Administration

College of Arts & Sciences, University of Delaware

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Serving the public good, shaping tomorrow's leaders

For forum links and additional information, please visit forum webpage:

http://www.ipa.udel.edu/transportation/intercitybus/index.html

Curbside Intercity Bus Transportation Policy Forum – June 13, 2013

Speakers

Nzinga Baker, Union Station Redevelopment Corp., Washington, D.C.

Stephen Buckley, Office of the Deputy Mayor for Transportation & Utilities, Philadelphia, Pa.

Eulois Cleckley, DDOT, Washington, D.C.

Frank Ross, FMCSA, King of Prussia, Pa.

Jay Shuffield, PANYNJ Jersey City, N.J.

Tom Maguire, NYC DOT, N.Y., N.Y.

Peter Pantuso, American Bus Association, Washington, D.C.

Participants

Lisa Collins, Del. Transit Corporation, Wilmington, Del.

Gary Kirk, FMCSA, Dover, Del.

Tim Conrad, UD-Transportation Services, Newark, Del.

Veron Kirkendoll, FMCSA, Dover, Del.

Bill Dofflemyer, Md. State Police, Linthicum Heights, Md.

Larry Klepner, UD-Civil & Environmental Engineering, Newark, Del.

David Dooley, Del. Transit Corporation, Wilmington, Del.

Sonya LaGrand, DelDOT, Dover, Del.

Stephano Dubuc, EPark of DC, Inc., Washington, D.C.

Michael McCormick, George Mason University, Oakton, Va.

Phillip Economou, Amtrak, Philadelphia, Pa.

Tavis Miller, Wilmington Police Dept., Wilmington, Del.

John Emberson, Megabus, Elizabeth, N.J.

Frank Murphy, Baltimore City DOT, Baltimore, Md.

Franco Esposito, NYCDOT, N.Y, N.Y.

Aaron Nathans, *The News Journal*, Wilmington, Del.

Arde Faghri, UD-Civil & Environmental Engineering, Newark, Del.

Todd O'Boyle, UD – IPA, Newark, Del.

David Hall, BoltBus, Dallas, Tx.

Rich Palmer, DelDOT, Dover, Del.

Bruce Hamilton, Amalgamated Transit Union – Local 1700, Washington, D.C.

Phil Strohm, FMCSA, Dover, Del.

Herb Inden, Del. Office of State Planning Coordination, Dover, Del.

Martin Wollaston, UD-IPA, Newark, Del.

Eric Jacobson, UD-SPPA, Newark, Del.

Tigist Zegeye, WILMAPCO, Wilmington, DelCurbside Intercity Bus Transportation Policy Forum

Introduction

Marcia Scott, Associate Policy Scientist, Eileen Collins, Public Administration Fellow, and Arthur Wicks, UD-University Transportation Center Graduate Fellow, UD's Institute for Public Administration (IPA)

As an introduction to the Curbside Intercity Bus Transportation Policy Forum, IPA representatives Marcia Scott, Eileen Collins, and Arthur Wicks discussed their current research on the curbside intercity bus industry. Ms. Scott provided a brief introduction of the project and addressed several "housekeeping" items. Ms. Collins indicated that the purpose of the policy was being held to better understand policy issues facing this industry, explore practices to manage this industry, as well as facilitate knowledge exchange among various stakeholders in the industry. Mr. Wicks discussed the issues of concern that have been identified throughout IPA's research on this subject, including safety, Americans with Disabilities Act of 1990 (ADA) compliance, inter-jurisdictional coordination, the effect of rogue carriers on the industry, curbside conditions and management, intermodal connectivity, concurrency of rulemaking, levels of regulation, and consistency of enforcement.

Ms. Collins reviewed two major components of IPA's research on the curbside intercity bus industry—the literature review and site visits. Concerning the literature review, she discussed the research areas that the team explored, including the history of the motor carrier industry; the effect of deregulation following the Bus Regulatory Reform Act of 1982; the resurgence of the intercity bus industry; current transportation policy issues; related environmental issues; and relevant proposed federal, state, and local legislation. Ms. Collins also discussed the site visits conducted by the IPA research team to document conditions at the curbside arrival and departure locations, the conditions on buses, as well as to observe passengers. Throughout the course of this project, the IPA research team conducted 13 site visits to Wilmington, Del., Cherry Hill, N.J., New York City, Philadelphia, Baltimore, and Washington, D.C. These site visits included rides on both mainstream carriers, BoltBus and Megabus, and also on a Chinatown carrier, Double Happyness Travel, Inc.

Mr. Wicks briefly discussed the online survey that the IPA research team created using Qualtrics, an online surveying tool used by the university. He explained that the intent of the survey was to gauge customer motivation for riding curbside intercity buses and collect demographic information. Mr. Wicks noted that, despite the team's best efforts, there has been a very low response rate to the survey. He also shared a few results from the survey. Most notable was that respondents identified the following factors as important in their selection of a curbside intercity bus company: 1) signage indicating the specific boarding area for each company, 2) convenient arrival and departure locations, and 3) the availability of staff to assist passengers and answer questions.

Ms. Collins described a case study conducted by the IPA research team about the shutdown of Double Happyness Travel, Inc. This company provided curbside intercity bus transportation from Wilmington, Del. to New York City. The company also provided service from other

locations in Delaware to Wilmington, Del. and other cities. She briefly described the process in which the carrier was shut down due to numerous safety violations.

Despite a shutdown order from the Federal Motor Carrier Safety Administration (FMCSA), the carrier continued to provide service and utilize chartered buses to service its routes. Ms. Collins explained that there was some confusion among the governing agencies of the legality of these actions. She noted that the FMCSA had also issued a "cease and desist" order and a "restraining" order to Double Happyness Travel. The company was eventually shut down by the city of Wilmington, Del. after the company applied for three separate name changes in order to continue operations.

Federal Strategies to Ensure Safe Operations of Intercity Curbside Buses

Frank Ross, Federal Program Specialist, Federal Motor Carrier Safety Administration, Department of Transportation, King of Prussia, Pa.

Frank Ross provided an overview of the FMCSA's efforts to ensure that curbside intercity buses operate safely. Mr. Ross explained the agency's efforts are focused around three core principles: 1) raising the bar for entering the industry, 2) holding motor carriers and drivers to the highest level of safety standards, and 3) removing all unsafe operators.

Concerning the first principle, Mr. Ross noted that the FMCSA subjects applicants to an intensive vetting process. Although applications are evaluated at the national level, some applications are passed to local divisions to investigate because of their proximity to the carrier applicant. Mr. Ross noted that 25 percent of applications are rejected during this vetting process. This rate also reflects some of the reincarnated bus carriers that had been shut down previously. Mr. Ross described the process that carriers, including new carriers, must go through in order to continue operations, which includes a safety audit. Mr. Ross noted that passenger carriers have nine months to successfully pass the safety audit, whereas non-passenger carriers have 18 months to pass the safety audit. If a carrier fails the safety audit, the passenger carrier has no more than 45 days to make corrections, or they will be placed out-of-service. He explained that there is a 34 percent failure rate for these audits. Carriers must then develop a corrective-action plan to address their failed safety issues. He explained that this increased vetting process and the safety audit process are the result of the August 2008 Iguala BusMex, Inc. motorcoach accident in Sherman, Tex. that killed 17 passengers.

Concerning the second principle—holding motor carriers and drivers to the highest level of safety standards—Mr. Ross described the various initiatives pursued by the FMCSA. Mr. Ross mentioned the Compliance Safety and Accountability program, which uses various data points to score passenger carriers on safety. He explained that these scores were used to direct the FMCSA's focus to carriers that are in most need of an inspection and compliance review.

Mr. Ross noted that vehicle inspections have increased nearly 100 percent between 2005 and 2012. Despite this increase, he identified en-route inspections as a very difficult task due to

safety considerations for operators, passengers, and inspectors. Mr. Ross clarified that the inspections are conducted by local and state entities that receive grants from the FMCSA.

These grants represent over 50 percent of the FMCSA's funding. He described the actions taken by the Eastern Service Area of the FMCSA from May 11–20, 2012, which resulted in the shutdown of 26 bus lines. Mr. Ross explained that during this nine-day period, over 2,700 motor carrier inspections were conducted. This resulted in 10.8 percent of the carriers being placed out-of-service, 4.9 percent of drivers being placed out-of-service, and 7.3 percent of vehicles being placed out-of-service. He also briefly noted that the FMCSA had enacted rules that banned motor carrier drivers from texting while driving and from reaching for handheld devices (cell phone, global-positioning-system device, etc.) while driving.

Concerning the third principle—removing unsafe operators—Mr. Ross noted that from January 2011 to May 2012 (not including the May 11–20, 2012, inspections) the FMCSA issued 70 unfit-for-service orders and 15 imminent hazard orders to passenger motor carriers. Mr. Ross added that a recent National Transportation Safety Board (NTSB) report indicated that curbside carriers were seven times more likely to be involved in fatal crashes than other passenger motor carriers. Mr. Ross explained that the FMCSA has also taken measures to inform consumers about unsafe carriers, including an FMCSA phone app and website where the public can view a carrier's safety record. He added that there is also a phone number to call to receive safety information about each bus carrier.

Mr. Ross described several issues that the FMCSA plans to address in the immediate future. This included addressing the problem of reincarnated carriers and creating a single national continuing liability standard that will tie shutdown carriers to their reincarnation. Mr. Ross also noted that rules must be created that will raise the penalty for operating without authority to match the current penalty exacted on household goods carriers. He also mentioned a recent NTSB motor-carrier-accident final report that includes recommendations to require a tenured ten-year driving history, use the Compliance Safety and Accountability program to determine each carrier's "fitness" to operate, and require a full safety review before a carrier's operations begin.

Question-and-Answer Session

- Q Eulois Cleckley (District of Columbia Department of Transportation) asked about the rationale behind the FMCSA's threshold for Compliance Safety and Accountability scores of passenger carriers versus household goods carriers. Specifically, Mr. Cleckley asked why the score for passenger carriers was lower than the threshold for household goods carriers.
- A Mr. Ross explained that a lower score meant a higher standard of safety, and, thus, passenger carriers were being held to higher level of safety than household goods carriers.
- Q David Dooley (Delaware Transit Corporation) requested that Mr. Ross discuss the difficulties in shutting down a bus company like Double Happyness Travel, Inc.
- A Mr. Ross explained that there are several issues that make shutting down a company difficult. Mr. Ross noted that there are several carriers that are closely associated with

Double Happyness that are still in operation. Although they have similar operating standards and issues, it is difficult to connect these carriers. Due to the ongoing investigation, Mr. Ross was not able to comment further on the topic.

- Q Franco Esposito (New York City Department of Transportation) asked if there are any means by which the FMCSA could authorize local entities to enforce federal rules.
- A Mr. Ross answered that this authority would have to be created through the respective state legislatures. Mr. Esposito noted that perhaps the FMCSA could direct local entities to pursue carriers that are violating rules, instead of the local entity investigating the carrier on its own.

Intercity Curbside Buses: An Industry Perspective

Peter Pantuso, President and CEO, American Bus Association, Washington, D.C.

Peter Pantuso provided an overview of private motorcoach services and other industry statistics. The bulk of the motorcoach industry is dominated by charter and tour services; scheduled services make up only 19 percent of the industry in a typical year. The industry serves as a substantial economic engine within the United States, employing about 128,000 people and generating \$112.7 billion annually. About 3,200 companies operate 35,000 motorcoaches that collectively transport 723 million passengers. There are three categories of scheduled services: 1) intercity bus services with nationwide shared-ticketing (interlining) and express (point-to-point) services utilizing curbside and terminal locations, 2) commuter services, and 3) casino services.

Overall, bus travel represents more traffic and passengers than air travel in most years, and represents an important economic engine. In a slide depicting a map of the network of intercity bus travel across the United States, Mr. Pantuso pointed out that buses sometimes are the only link between cities other than by car. Curbside service is part of this point-to-point service.

Mr. Pantuso described the positives of the new curbside industry and likened the business model to that of Southwest Airlines. He described a trend of second-tier buses with fancier alternatives, especially in New England, that compete with Amtrak and regional rail by focusing on comfort and service. One example he gave was a company offering routes from New Hampshire to New York City. In terms of negative attributes, he again related that "a bus is a bus" and that customers do not differentiate between the quality of service on buses they see. He discussed the Chinatown bus companies, which are NOT represented by the American Bus Association (ABA), and said they are not "belongers/joiners, don't want to be integrated, and would rather operate "under the radar."

Mr. Pantuso stated that the ABA was happy to see the 26 companies shut down recently and that it was wonderful that Double Happyness Travel, Inc., had been and, if necessary, its successors would be shut down as well. He said he supports inspections at facilities where bus companies are located, rather than roadside inspections, which are unsafe for customers.

Mr. Pantuso stated that ABA represents 800 bus companies, which is 65 percent of all equipment on the road, and that the ABA wants to help legitimate companies comply with federal legislation. Safety is ABA's number one priority, and he emphasized that buses are the safest mode of surface transportation. He stated that the FMCSA needs more funding, and to make enforcement more consistent. Some states, he asserted, are "safe havens" from bus enforcement and do not seem to realize the need for action. The ABA has suggested that the FMCSA hire a third party if necessary for inspections similar to those of the Department of Defense. The ABA also supports a federal-style license similar to that required of pilots by the Federal Aviation Administration. He also stated that when a bus is placed out-of-service, the bus should be booted or locked up, but acknowledged this is a states' rights issue, and therefore complicated, but that it was the only way companies like Sky Express would not reappear as reincarnated bus companies. He emphasized that drivers, like the one in the Bronx accident, should never have been on the road in the first place.

Mr. Pantuso noted that the ABA is glad to see the U.S. Secretary of Transportation actively engaged in the motor carrier industry because it has a lot of economic potential, and has been a stable force in an uncertain economy. Intercity bus passengers generally purchase roundtrip tickets, stay about 4-5 days at a destination, and spend about \$92 per day. Intercity buses also help to take cars off the road, which helps to mitigate roadway congestion and lower harmful emissions.

Mr. Pantuso noted that the profile of passengers now is older than in the beginning of the curbside bus industry. While about 73 percent of intercity bus passengers are under 35 years of age, the profile of intercity bus passengers is beginning to change. In addition, the industry has seen consistent growth—up six percent from 2010. There is a significant growth in curbside departures and point-to-point services. New operators like C & J and Dartmouth, which have high-end two-in-one service (larger seats, meeting areas, and even onboard food service), are expanding services to meet growing demand in New England.

Mr. Pantuso reiterated the commitment to safety and how his organization wants to work with the FMCSA to help clarify numbers and scores so that the public can better understand the safety information that the FMCSA provides. He stated that the SaferBus phone application was difficult to use and must be available for all smart phones (not just the Apple iPhone). The ABA wants to educate the consumer and emphasize that price is not as important as safety in choosing a company with which to work. The ABA vets their members quarterly and asks ones not meeting standards to change, or to leave. He stated that the ABA looks at more than the Safety Measurement System (SMS) score. Regarding rulemaking, the ABA supports seat belts, and electronic onboard recorders, which they believe will practically eliminate the falsification of records. He said that they do not want these requirements to be barriers to entry, but to support safety as the highest priority.

Question-and-Answer Session

- Q Herb Inden (Delaware Office of State Planning and Coordination) asked about enforcement consistencies and whether Pennsylvania had similar standards.
- A Mr. Pantuso stated that the federal regulations are the same everywhere, but that there are inconsistencies in enforcement, and he named Texas as an example of a state with lax regulations. He stated that there are some companies that are already licensed, but should be weeded out; and it was a challenge when companies are shut down, but merely shift operations to an existing licensed company with little change in operating behavior.

Mr. Pantuso stated that curbside carriers are seven times more likely to have a fatal accident. David Hall (BoltBus) stated that his company is 35 times better than these carriers, but is unfortunately lumped in with all curbside carriers. He understands there is very little the state can enforce, but that Maryland is doing a good job.

Mr. Pantuso described changes in curbside buses, especially using bus terminals as in South Station and Union Station. He mentioned several studies that examined the differences, but noted that there is definitely a difference between the smaller and newer carriers versus BoltBus and Megabus and the legacy carriers.

- Q Todd O'Boyle (University of Delaware) asked if growth in the Northeast is saturated, and are ABA-affiliated companies looking for growth in smaller locales?
- A Mr. Pantuso responded that if the demand exists, companies will consider these locations. For example, for a city that is losing its air service because of federal programs being discontinued, buses make sense to fill that void. He thinks it's the same outside the Northeast, because it's "not your grandfather's bus" and bus service is more attractive as tolls increase.
- Q Phil Strohm (FMCSA) asked about terminal inspections and noted that according to a study on truck crashes done by the University of Michigan, driver input outweighed problems with vehicles. This presents a challenge for inspectors and creates an inconsistency with the cause of crashes.
- A Mr. Pantuso responded that this was a fair point. Inspection stops en-route, scheduled or otherwise, cannot supersede safety. Sky Express had 204 violations and 94 roadside inspections and yet was still operating.

Panel Discussion: New Solutions to Managing Intercity Curbside Bus Operations

Nzinga Baker, Vice President, Union Station Development Cooperation, Washington, D.C.

Nzinga Baker provided an overview of the Union Station Redevelopment Corporation's (USRC) interaction with the curbside intercity bus industry. The USRC leases Union Station from the U.S. Department of Transportation. Ms. Baker described the layout of the Union Station property, including the location of the bus deck used by curbside intercity buses. Ms. Baker provided a few statistics about traffic moving through Union Station and mentioned that aside from curbside intercity buses nearly 100,000 passengers move through Union Station daily.

Ms. Baker explained the evolution of the USRC's inclusion of curbside intercity buses into the bus station. Before November 2011, the bus deck was used to park tour buses. In April 2011, the Secretary of Transportation tasked the USRC with creating a plan to incorporate curbside intercity bus operations into Union Station. Union Station was given 90 days to develop a plan that included a design to accommodate double-decker buses as well as meet ADA standards; a financial plan; and an offsite alternative for tour bus parking.

Ms. Baker noted that a major catalyst for the plan was the decision by District Department of Transportation (DDOT) to regulate and charge for the use of curbside buses. Ms. Baker explained that the financial plan was designed for both the costs of operating and maintaining the bus deck and for making capital improvements. These capital improvements included onsite amenities, such as information kiosks, and also an offsite parking lot for tour buses. To address the operation and maintenance costs, the USRC created a per-slip fee of \$2,500/month. The identified capital improvements would be paid for by a fee of \$0.75 per passenger whose bus trip originated or terminated in Union Station. Ms. Baker noted that many of the capital improvements, including ticket facilities, waiting room, and information kiosks, were scheduled to be completed by November 2012.

Stephen Buckley, Director of Policy and Planning, Office of the Deputy Mayor for Transportation and Utilities, Philadelphia, Pa.

Mr. Buckley summarized outcomes of a National Association of City Transportation Officials (NACTO) roundtable session that convened in Philadelphia, Pa., in November 2011 to discuss curbside intercity bus management issues and strategies, such as regulating and permitting within large metropolitan areas. While most metropolitan areas are experiencing pressures to manage curbside bus operations, each location has a unique set of issues, he noted. Cities were encouraged to share their experiences with curbside bus operations and the impact associated with growth, such as congestion, idling, illegal vendors, and litter.

Mr. Buckley stated that he would focus on issues faced by Philadelphia. The city views the curbside bus industry as an affordable option for intercity travel and wants to accommodate it, but hopes companies are good neighbors for the city as well. They are looking to help mitigate

the negative aspects and accommodate the growing demand for intercity bus travel. The city has one company left in Chinatown, and the other, New Century Travel, has been recently placed out-of-service. He noted that many local institutions are opponents of the buses.

He showed a map of center city Philadelphia with the locations they have provided for curbside service and noted that this part of the city hosts more than 225,000 jobs. He explained that the city cannot control arrivals due to traffic as well as other reasons. The site behind 30th Street Station, where BoltBus and Megabus operate, is on the 3100 block of *John F. Kennedy Boulevard* (JFK Blvd.) and has one space for departures and two arrival spaces. Additionally, the city has limited arrivals and departures to three per hour. It removed nine metered spots for this bus stop location on JFK Blvd. Issues of concern for the city include taxicabs hovering instead of waiting in line at the cab stand at the nearby train station, cars dropping off passengers, and double parking.

New Century Travel was in a "tough part of town," located adjacent to the Greyhound Station in Chinatown, and was recently shut down, leaving just one carrier around Race Street and 11th Street in Chinatown. The city moved the Megabus and BoltBus location behind 30th Street Station further down JFK Blvd. The location still has issues of illegal parking layovers, illegal vendors, and disputes with adjacent Drexel University. Higher-education institutions have complained about the proximity of curbside intercity bus operations, but students benefit from the long-distance, point-to-point service. The university, Megabus, and BoltBus are working with the city as well as the business improvement district, and Mr. Buckley hopes these talks represent an ongoing relationship with stakeholders and operators. Drexel has plans for expansion and redevelopment of the adjacent site on JFK Blvd., and the city has promised to search for a new possible area for the buses that would have minimal spillover effects.

Currently, the city has a total of five dedicated spaces. In order to secure these spaces for bus use, the operator must replace meter revenue, which Mr. Buckley cited as about \$25,000 per year for three spaces. The city conducted a survey of 180 people, of which 120 were using the buses behind 30th Street Station and the rest in Chinatown. Fifty-five percent of the ridership was female, 45 percent were male, 45 percent were students, and 75 percent were between the ages of 18 and 35. Additionally, the survey found that 40 percent arrive by transit and, surprising to the city, he noted, that 19 percent described themselves as business travelers.

Eulois Cleckley, Manager, Statewide and Regional Planning Branch, Transportation Policy & Planning Administration, District Department of Transportation, Washington, D.C.

Eulois Cleckley provided an overview of the District Department of Transportation's interaction with the curbside intercity bus industry. Mr. Cleckley briefly explained the history of the curbside intercity bus industry in Washington, D.C. He noted that the industry became prevalent in the mid-1990s, with DuPont Circle and Chinatown as the two main areas of operation for curbside bus carriers. Mr. Cleckley stated that these bus carriers were largely ignored until these areas became centers of economic development. Specifically, the construction of the MCI Center (now the Verizon Center) created a large influx of commercial and residential tenants, who did not favor the presence of these buses.

Mr. Cleckley noted that, according to a survey conducted by the National Capital Region Transportation Planning Board, the District of Columbia has over 1,800 buses moving in and out of the district daily. Of these buses, 50 percent are charter or tour buses, 12 percent are commuter buses and 8-10 percent are intercity carriers. He explained that this 8-10 percent represents a significant transportation mode in the city. He continued that DDOT needed to find a way to regulate and partner with the industry to create effective and safe operations while ensuring that the effectiveness of public infrastructure is not compromised.

Mr. Cleckley stated that in June 2011 DDOT began requiring that all carriers apply for a permit to use the curbside. With this requirement, DDOT now has oversight of where carriers are located. He explained that this initially led to a massive shift of carriers from Chinatown to L'Enfant Plaza, but many passengers were displeased with this move. To address this issue, carriers now choose the curbside they would like to use, which is then reviewed by a committee. He noted that as part of the application, the carrier must provide information on the curbside location, local businesses, and their bus operating schedules so that the committee can make an informed decision. He explained that the result of these actions has led major carriers, like BoltBus and Megabus, to move to Union Station, while smaller carriers still apply for the curbside permits.

One final issue that Mr. Cleckley raised was the difficulty in securing federal funds to address issues with the curbside intercity bus industry. For example, FMCSA funds are only used for safety inspections and enforcement. Funds to plan and create facilities for bus parking would need to come from the Federal Highway Administration.

Jay Shuffield, Supervisor of Transportation Planning, Port Authority of New York and New Jersey, New York, N.Y.

Mr. Shuffield began by describing the Union Bus terminal built in 1950 and described the various additions, including the parking addition, as a revenue stream, as well as the creation of a dedicated bus lane on the Interstate 495 approach to the Lincoln Tunnel. He stated that the vision of the Port Authority Bus Terminal was then to consolidate all bus activity into one location to minimize the proliferation of smaller bus terminals. He stated that 90 percent of passengers passing through the bus terminal today are commuters. He noted that the Port Authority is a financially self-sufficient agency and that the Port Authority Bus Terminal is supported by fees paid by the bus companies, as well as cross-subsidies from toll revenue.

Mr. Shuffield noted challenges and constraints on the terminal and described the necessary reduction in bus berths when renovating for ADA standards. This and other issues have resulted in regular delays for commuter passengers. He described the building with the term "functional obsolescence," using the example of weight limits and vertical clearance each restricting bus usage, such as with Megabus's double-decker buses. He noted that the express buses are using some curbside locations now. Increased development in Midtown Manhattan, where the Port Authority is located, is creating increasingly tighter spaces; in addition to curbside buses, there has been growth in local transit (MTA), jitneys, as well as charters. New development means loss of off-street parking for buses, and there is increased competition for new uses. Often new

residential tenants object to nearby bus parking. There is also limited capital funding to support these concerns. He emphasized the need to partner with the New York City Department of Transportation (NYCDOT) to craft solutions. He mentioned the pending New York State bill and noted the need to actively manage bus operations in an area with capacity constraints.

Tom Maguire, Assistant Commissioner, New York City Department of Transportation, New York, N.Y.

Tom Maguire provided an overview of NYCDOT's interaction with the curbside intercity bus industry. Mr. Maguire stated that the current structure of regulation and rulemaking in New York City is very fluid, which creates challenges for managing the intercity bus carriers. Mr. Maguire noted that a bill is currently moving through the State Senate that would give NYCDOT the power to regulate these carriers. He explained that, despite the absence of regulatory power, there are still many aspects of the industry that need to be managed, including ensuring that the carriers do not block other transit systems and that sidewalks and streets are passable where carriers operate. Despite these challenges, he noted that NYCDOT views this industry as an important component of the city's transportation system.

Mr. Maguire noted that curbside intercity operations are focused in two areas—Midtown and Chinatown. According to Mr. Maguire, there are 450 curbside departures per day as of summer 2010. Mr. Maguire compared this to 150 daily departures at the Port Authority Bus Terminal. He explained that operators can voluntarily approach the city and request a bus stop. In exchange, NYCDOT will assess the site's conditions and post signage indicating the area as a bus stop for that specific company. Currently, local community boards have veto power over any intercity bus stop permits in their district. He noted that both BoltBus and Megabus have already applied for spots and received signage.

Mr. Maguire discussed several pieces of pending state legislation that would establish a permitting system for all on-street intercity bus loading and unloading, prohibit loading and unloading outside of permitted locations, and allow the New York City Police Department to enforce locations. He raised several issues that NYCDOT must address going forward. First, what are the appropriate criteria for evaluating curbside sites? Another issue is the need to move the community boards from a purely vetoing role to a more consultation role in the decision-making process.

Question-and-Answer Session

- Q Mr. Buckley asked Mr. Cleckley to comment on the number of carriers and spaces used by those receiving permits.
- A Mr. Cleckley responded that there are eight operators, aside from BoltBus and Megabus, using permitted spaces. Mr. Cleckley also noted that there were several carriers DDOT still needed to track down and permit and that there is a \$500 fee for every permit violation.
- Q Frank Murphy (Baltimore City Department of Transportation) asked Ms. Baker to clarify what the passenger fee and slip fee covered. Ms. Baker explained that the slip fee covered

- operations and maintenance costs, whereas the per-passenger fee covered capital improvements.
- A Ms. Scott asked Mr. Cleckley to discuss the permit costs implemented by DDOT. Mr. Cleckley explained that the permit cost represents a \$2.50-per-space-per-hour fee and an additional fee to remove parking meters. Mr. Maguire noted that in New York City, pending legislation would limit the permit fee to \$275 per bus, but that the actual fee may be lower.

Roundtable Discussion

Moderated by Marcia Scott, Associate Policy Scientist, IPA, UD

Arde Faghri (University of Delaware) asked if there is a concern about overregulating the intercity bus industry. John Emberson (Megabus) explained that a lot of regulations are already in existence, but that they support these regulations. Mr. Emberson continued by stating that there are enough regulations in place, but jurisdictional issues need to be addressed. Bruce Hamilton (Amalgamated Transit Union) countered that there is very little regulation and that the proliferation of curbside carriers is a direct result of deregulation. Mr. Hamilton noted that there have been several reports published that illustrate the negative effect on safety by the industry's deregulation. Mr. Cleckley explained that there are two regulatory environments—federal and municipal. Mr. Cleckley added that there is a need to create equity within regulations so that smaller carriers are not priced out of the industry.

Mr. Pantuso took the opportunity to address several threads of the conversation. First, he identified pricing companies out of the market as a major issue. He added that it is not appropriate to use carrier permits as a revenue source for city governments. Second, he explained that regulation must not restrict the industry, as it is a major component in congestion mitigation on city roadways and the industry represents an environmentally friendly transportation option. In response to the subject of regulation, Mr. Pantuso stated that deregulation has been good for the motorcoach industry and has resulted in more companies and more workers.

Ms. Scott raised the question of what costs motivate the choice of curbsides over the use of intermodal facilities for intercity carriers. David Hall (BoltBus) explained that the primary difference, in terms of cost, was the sales channel. Online tickets sales are significantly less expensive, and, thus, BoltBus does not need ticket booths with employees at intermodal facilities. Philip Economou (Amtrak) noted that these intermodal facilities provide other infrastructure that the intercity carriers do not, such as bathrooms, phones, and shelters. Mr. Economou added that this was of particular significance during the winter months. Mr. Hall noted that weather did not affect ridership. Ms. Baker explained that Union Station faces a similar issue and that many intercity bus passengers wait in the station during the winter months. The station has trouble handling these extra passengers while ensuring that bus passengers have an experience similar to that of train passengers. Mr. Economou added that in Amtrak-owned stations, regional rail helps to pay for restrooms, Amtrak police and other amenities, whereas intercity bus carriers do not provide funding at all. Mr. Hall countered that BoltBus has never been asked to provide funding and would entertain an appropriate request.

He noted that BoltBus moved 25 percent of its New York City traffic to the Port Authority area, but curbside service was roughly 30 percent more popular. Ms. Scott asked why this was more popular. Mr. Hall explained that customers preferred the intermodal connectivity provided by a location near Penn Station. Mr. Emberson noted that customer surveys identify intermodal connectivity as a chief concern.

Lisa Collins (Delaware Transit Corporation) asked about how each city determines or negotiates a curbside bus location. Ms. Collins noted that this issue is probably complicated by businesses and residents wanting the service provided by intercity buses, but not wanting the facilities placed in front of their buildings. She stated that a model is needed to determine a good spot. Mr. Maguire explained that in New York City, the issue is that they are running out of spaces to put these buses. There are already hundreds of parking spaces that have been identified as important for use for loading zones and operating city buses. He noted that intercity buses are unique, but not special; they should be brought into the framework that governs prioritizing space for loading zones and city buses.

Mr. Faghri asked about who is funding improvements to Union Station and what role the private sector plays in financing facilities. Ms. Baker explained that the USRC pays the upfront costs and is repaid by private operators within Union Station. Ms. Baker added that retail leasing is subcontracted out to a third party and that some revenue is created through this leasing. Mr. O'Boyle asked Ms. Baker to clarify how the per-passenger fee works and if it is time-limited. She responded that initially the fee has a five-year term and there is a clause to continue the fee if needed. The fee was based upon paying the cost of capital projects within a three- to four-year window; carriers were asked to estimate their annual ridership so the per-passenger fee could be determined.

Mr. Hamilton suggested that many of the issues discussed could be dealt with by bringing the carriers into the stations. According to him, Greyhound customer surveys have shown a preference for bus station facilities over curbside pickup. Mr. Hamilton also noted that Greyhound has had tremendous success with the implementation of a point-to-point service called Greyhound Express.

Mr. Dooley stated that it seemed that the rogue carriers and Chinatown carriers are causing issues, whereas BoltBus and Megabus are just in need of better partnerships with stations.

Mr. Shuffield noted that management of the industry must be driven by volume and congestion. For example, smaller cities may not need to consider off-street management options, whereas larger cities need to pursue off-street locations for intercity buses. Mr. Shuffield added that the intercity bus industry should be considered as part of a larger congestion-mitigation strategy for cities. Mr. Buckley explained that Philadelphia's bus terminal is at capacity and that the surrounding area is already congested. Currently, curbside bus operations utilize vacant land near 30th Street Station. Mr. Buckley noted that this area will eventually be redeveloped and that the bus operators may be forced out of that area.

Ms. Scott asked Mr. Murphy to explain why bus operations are directed to White Marsh Mall. Mr. Murphy explained that while Megabus provides service to White Marsh Mall, BoltBus provides downtown service to Baltimore's Penn Station. He added that Baltimore is facing issues with the growth of the industry. A lack of foresight has led to a highly congested area used by intercity buses, taxis, circulator buses, and local transit. He stated that Baltimore needs to find a place that accommodates these many modes of transportation. He noted that Baltimore does not currently have curbside permits.

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