

The Real Effects on the Boston Area of the 2004 Democratic National Convention

Paul Bachman

John Barrett



May 2004 - Update

Introduction

There have been many estimates of the economic impact of the Democratic National Convention on the Boston economy. These estimations analyze the effects from increased spending due to the influx of convention attendees. Absent from the analyses is the negative impact arising from events being crowded out of Boston because of the convention, such as Sail Boston 2004 and the U.S. Olympic gymnastic qualifying event. In addition, the negative impact of the congestion brought on by the closing of North Station, I-93 and other road closures must be considered.

This economic activity will no longer occur because of the Democratic National Convention therefore, this loss of economic activity needs to be subtracted from the economic impact of the convention to ascertain the net economic activity due to the convention. Table 1 below summarizes the details.

Table 1. Net Economic Effect of Democratic National Convention		
Event/Closures	Change in Direct Spending (\$mill)	Total Value Added (\$mill)
Event		
Democratic National Convention	113.1	121.6
Sail Boston 2004	-85.0	-95.6
U.S. Gymnastics Qualifying	-13.39	-15.0
Lost Tourism	-7.5	-8.6
Total Event	7.2	2.4
Closures		
Closing I-93 and North Station	NA	-23.8
Additional Road Closures	NA	-12.9
Net Economic Impact	7.2	-34.3

Methodology

The IMPLAN model of the Boston metropolitan area was used to determine the potential economic impact of the Sail Boston 2004 and U.S. Olympic gymnastic team events that were crowded out because of the Democratic National Convention. The estimated additional direct spending for these events was \$85 million for the Sail Boston 2004 event and \$15 million for the US gymnastics team event.¹ The resulting value added, or extra economic activity, from these

¹ The Sail Boston 2004 spending was based on a spending estimate derived by the Boston Redevelopment Authority (BRA) for Sail Boston 2000 in June 2000. The U.S. gymnastics event spending estimate is

events to the Boston area is \$16.8 million for the gymnastics event and \$95.6 million for the Sail Boston 2004 event.

To compute the lost productivity of workers due to the closing of I-93 and other roads around Boston we used the daily car count for each stretch of road from the Massachusetts Highway Department. We assumed that 50% of this figure would be commuters affected by the closing. This figure was multiplied by the average number of passengers per car from the Texas Transportation Institute to arrive a figure for the total number of commuters. We assume that the commuters will, on average, lose 1 hour of productive work time per day due to the traffic restrictions. These figures are multiplied together to provide us with the total number of hours lost per day. This result is then multiplied by the number of days (4) that traffic will be restricted giving us a figure for the total hours of work lost. We then multiply this result by our dollar figure for the average productivity per hour worked. This provides an estimate of the total loss of productivity in dollar terms due to the road closings.

A similar method was used for the North Station closing calculation. Assuming that the 50% of the total number of daily North Station users are commuters, and multiplying this number by our assumption that the average number of productive hours each commuter will lose 1.5 hours of productive work time per day gives us a figure for the total number of lost productive hours. This result is multiplied by the total number of workdays North Station will be closed (5) to arrive at our total number of hours of lost productivity. By multiplying this result by our dollar figure for productivity per hour worked gives us the final result of the total loss of productivity in dollar terms due to the closing of North Station.²

derived on estimates derived by the Greater Boston Convention and Visitors Bureau for the 2000 event. The spending by industry for both was based on the spending pattern in the BRA report.

² Appendix 1 contains the details of these calculations.

Appendix 1

Table 2. Economic Impact of Closing I-93 and North Station	
I-93 and other Road Closures	
Total car count per day	440,830 ³
Percent traveling after 4 p.m.	50%
Total	220,415
Passengers per car	1.25 ⁴
Total	275,519
Additional travel time (per person)	1
Total increase in travel time (per day)	275,519
Total work-days of closure	4
Total hours of work lost	1,102,074
Productivity per hour	\$30.68
Total loss of productivity	\$33,811,641
North Station (NS)	
Number of Commuters at NS per day	25,000 ⁵
Percent affected by convention	50%
Total	12,500
Additional travel time (per person)	1.5
Total increase in travel time (per day)	18,750
Total work-days of closure	5
Total hours of work lost	93,750
Productivity per hour	\$30.68
Total loss of productivity-North Station	\$2,876,250
Total loss of productivity-I-93	\$33,811,641
Total loss of productivity	\$36,687,891

³ Massachusetts Highway Department, "Route Traffic Volume Counting List"; Internet; available at <http://www.state.ma.us/mhd/traffic/traffic.htm>; accessed on 8 April 2004.

⁴ David Schrank and Tim Lomax, "2003 Annual Urban Mobility Report", Texas Transportation Institute, (2003); Appendix B, p. 23; Internet; Available at http://tti.tamu.edu/product/catalog/reports/mobility_report_2003.pdf; Accessed on 08 April 2004.

⁵ Raphael Lewis, "North Station may shut for the Parley" Boston.com (03 March 2004); Internet; available at http://www.boston.com/news/local/massachusetts/articles/2004/03/03/north_station_may_shut_for_parley/; accessed on 08 April 2004.