The Economic Impact of the Democratic National Convention on the Boston Economy: The Final Tally

August 9, 2004
For the four-day period, July 26-29, the 2004 Democratic National Convention concentrated the minds of Bostonians like nothing since the famous tea party of earlier times. As a political event, the DNC was a success, with the party faithful rallying behind their nominee Sen. John Kerry. It was a success, too, insofar as there were no major disruptions from protestors and no acts of terrorism. Both inside and outside the Fleet Center, the convention ran smoothly. As far as the host committee was concerned, the worst thing to have happened was a hitch in the balloon drop.

There remains, however, the question of how the convention affected Boston’s economy. Mayor Thomas Menino predicted that the convention would yield $154 million in benefits. Since April, the Beacon Hill Institute at Suffolk University has offered its own, consistently less optimistic, measure, updated as new information became available about event cancellations and security spending and efforts.

The convention would not, we always knew, come close to the mayor’s estimate. The road closures and the closure of North Station threatened to tie up hundreds of thousands of commuters and travelers in traffic. The increased surveillance of subway riders deterred some riders, uncomfortable with the idea of having their backpacks searched or with the security worries that the searches reinforced. The convention forced the cancellation of other events that would have brought in millions of dollars in new spending.

As the convention approached, it became clear that commuters and travelers would either submit to traffic delays or stay home. As it turned out, enough decided to stay home that the threatened traffic jams never materialized. As some businesses closed or revised their work schedules, a large number of commuters adjusted by either telecommuting or taking summer vacations. Tourists likewise stayed away in large numbers.

As a result, the city avoided the loss of workers’ productivity that would otherwise have occurred. On the other side of the coin, there was a substantial loss in local business that likewise would not have occurred if the convention had not impeded the normal flow of commuters and tourists.

Another disappointment arose over the promised spending by convention delegates and other attendees. Supporters of the convention had argued that delegates and non-delegates, would, like other visitors, stream into Boston restaurants and shops. Instead, as has become the practice with
political conventions, the attendees flocked to corporate parties and receptions at either the FleetCenter or other locations. This left local businesses with an uneven experience, one that produced both winners and losers: Businesses hosting attendees or involved with convention events (hotels and caterers) received a boost, while others (bars, restaurants and retail stores) were left with extra inventory and empty seats and cash registers. Just before the convention, the imminence of lost business became apparent from a BHI survey of one hundred local businesses in which only 11% reported an expected increase in patronage.

The Net Impact

In estimating the effects of the convention before the fact, we were compelled to make judgments about how the extensive security measures would manifest themselves economically (traffic tie-ups or reduced commuting), what the final tally in terms of security spending would be (it turned out to be somewhat lower than expected) and how much convention attendees, commuters and tourists would finally spend. Now, with the convention behind us, we can tally up the benefits and costs.

BHI estimates that the convention produced a net economic gain of $14.8 million to the Boston economy. Table 1 summarizes the results. The details of our calculations are presented in the Appendix.

Table 1: Net Economic Effects of the Democratic National Convention

<table>
<thead>
<tr>
<th>Spending Category</th>
<th>Direct Spending ($mil)</th>
<th>Total Value Added ($mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic National Convention</td>
<td>140.3</td>
<td>156.7</td>
</tr>
<tr>
<td>Displaced Events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sail Boston 2004</td>
<td>-85.0</td>
<td>-95.6</td>
</tr>
<tr>
<td>U.S. Gymnastics Qualifying</td>
<td>-13.4</td>
<td>-15.0</td>
</tr>
<tr>
<td>Displaced Event Total</td>
<td>-98.4</td>
<td>-110.6</td>
</tr>
<tr>
<td>Lost Tourism</td>
<td>-19.9</td>
<td>-22.8</td>
</tr>
<tr>
<td>Commuter Spending</td>
<td>-7.5</td>
<td>-8.5</td>
</tr>
<tr>
<td>Net Economic Impact</td>
<td>14.5</td>
<td>14.8</td>
</tr>
</tbody>
</table>
On the plus side, we have spending by delegates, the convention host committee, security officials and event sponsors adding up to $140.3 million. Translated into final economic impact, this side of the ledger shows $156.7 million in benefits to the city. Offsetting the benefits are the costs to the city, measured by the value of events that were displaced by the convention and by reduced spending by commuters and tourists. On balance, the effect of the convention turns out to be positive (if small) because the lost spending by commuters and tourists, however, painful for local merchants, was less harmful than the benefits from the new spending brought in by the convention.

Was having the convention in Boston this year a good idea? That is for others to answer. It turns out that the convention did, in the end, make money for the city (though certainly far less money than the mayor claimed). On the other hand, the city ended up in the black only by adopting a conscious policy of scaring people away, of pushing area residents to telecommute or to take unplanned vacations to avoid the mess.

Someone might wish also to reflect on the likelihood that the city would have done much better economically had the event been switched to the new Convention Center, where security considerations would have been less daunting. Boston merchants lost money on this event so that the host committee could put on a better show for its TV audience.

The final lesson is that, in the age of terrorism, Boston can hold an event such as this and come out an economic winner provided it is willing to disrupt normal city life in order to protect itself against the threat of terrorist attack. Since Boston is unlikely to have another such event in the foreseeable future, its experience offers a lesson mainly to other cities contemplating events to come. We await with interest the event that is about to unfold in New York City.
Appendix

Convention Spending

*Attendee Spending*

We had originally estimated that total spending by convention attendees would be $48.5 million. Here we use a delegate survey conducted by the Boston Globe and published on August 1, 2004 to adjust downward this original estimate. For delegates, we used a weighted average of the survey responses for total spending to arrive at a reduction of $59 dollars per day, and we distributed this reduction evenly over all spending categories (not including hotel). We applied the same adjustment to 15,000 non-delegates, based on the assumption that half the expected 30,000 non-delegates attended private parties along with the delegates. The total reduction for both delegate and non-delegate attendees was $8.7 million, leaving us with an adjusted estimate of $39.8 million.

*Security Spending*

Security spending was less than the $50 million expected immediately before the convention. We adjusted the security-spending figure from $50 million to $37.5 million as the midpoint between the $35 to $40 million estimate provided by city officials and reported by local news organizations.

*Private Party Spending*

We include private party spending in our estimate of total spending for the convention. The private party-spending figure of $20 million derives from a June 25, 2004 supplement to the Boston Redevelopment Authority (BRA) report, *The Economic & Fiscal Impact of the 2004 Democratic National Convention in Boston.*

The BRA figure appears reasonable if we assume that each of the 35,000 convention visitors attended one party per night for five nights (Sunday through Thursday), totaling 175,000 individual party guests. This assumption appears reasonable in part because if delegates and non-delegates did not dine in the city’s neighborhoods, they probably dined courtesy of convention hosts. The average cost of each party would have been $114 per person. Some of the parties included local guests, but some convention attendees, like members of the media, were unable to attend all five parties due to their work schedules. So locals and non party attending visitors cancel each other out.
Advertising Value of Exposure

Convention supporters maintain that some of the economic benefits are intangible. The amount of exposure the city will receive, they argue, justifies the cost. However, attempting to estimate the future value of advertising exposure is always a nebulous task. A review of the visitor statistics for the host cities of the national party conventions in 2000 (Philadelphia and Los Angeles) offers little value because the distortions of the September 11 terrorist attacks and the national recession drove visitor numbers down in the year after the conventions. Visitor figures for the 1996 conventions in San Diego and Chicago reveal no sustained increase in the number of visitors in the years following the convention beyond the percentage growth rate of the national economy. In other words the increases in visitors to the convention cities in the years following the convention are in line with what one would expect in a growing economy. Furthermore, the Boston convention drew little national television coverage of the city itself. As a result, we conclude that the value of national advertising exposure remains small and hard to quantify.

Events

Sail Boston

Our initial estimate of the economic impact of the loss of Sail Boston 2004 was based on numerous conversations with event organizers and the BRA estimate for Sail Boston 2000. The BRA based its estimate for Sail Boston 2000, published prior to that year’s event, on the assumption that 2.2 million people would attend the event. According to event organizers Sail Boston 2000 drew 7.5 million visitors and the BRA itself, in its report *The Boston Economy-2003*, estimates that “Sail Boston 2000…attracted over 4 million people to the waterfront for a parade of Tall Ships.” We believe the BRA estimate of $88.96 million for Sail Boston 2000 understates the economic impact of the event by at least 100%.

Sail Boston 2004 organizers estimate that the event would have attracted at least eighteen “Class A” ships (over 175 feet in length) to Boston for five full days. Furthermore, they estimate that 3.5 million visitors would have attended the event, with 10% being overnight guests, and the rest as day-trippers coming from Massachusetts and other New England states. Given that the 2004 event was going to be smaller than the events of 2000 and 1996, we base our estimates on the assumption that the event would have attracted 88,000 overnight guests (staying for an average 2.1 days for a total of 184,521 visitor days) spending $285 per day (including hotel, food & drink and retail) and an additional 850,000 day-trippers spending an average of $38 per day on food & drink and in retail
establishments. The total visitor number of 938,000 equates to 187,600 people for each day of the event. We remain confident that these numbers represent reasonable, if not conservative, estimates.

Table 2: 2004 Sail Boston Visitors Spending

<table>
<thead>
<tr>
<th></th>
<th>Visitors</th>
<th>Visitor days</th>
<th>Spending per day</th>
<th>Total spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>850,000</td>
<td>850,000</td>
<td>$38</td>
<td>$32,300,000</td>
</tr>
<tr>
<td>Overnight</td>
<td>88,000</td>
<td>184,800</td>
<td>$285</td>
<td>$52,668,000</td>
</tr>
<tr>
<td>Total</td>
<td>938,000</td>
<td>1,034,800</td>
<td></td>
<td>$84,968,000</td>
</tr>
</tbody>
</table>

US Gymnastics Qualifying Event

The Greater Boston Convention and Visitors Bureau provided the spending and economic impact figures for U.S. Gymnastics Trials.

Lost Tourism

For lost tourism we use the visitor figures from the National Parks Service facilities in Boston as a proxy for total tourism in Boston, corroborated by conversations with officials at other tourist spots around the city. Data from the Parks Service indicates that visitor numbers in July 2004 were down 6.65% compared to the previous July; and other tourist spots indicated that their business was off by an average of 47%. The total drop of 6.65% for the Parks Service in July 2004 is assumed to take place during the week of the convention, and thus the actual percentage change for that week becomes 26.6%, assuming that the other three weeks in July were flat. Since the other tourist spots represent only a few observations, and some displaced tourists will choose to visit Boston at another time this year, we use the 26.6% from the park service. This 26.6% change is then applied to our estimate for average tourist spending per summer week of $74.8 million dollars, bringing the total loss of tourist spending to $19.9 million.

Commuters

Closures

The closures of I-93 and North Station produced little disruption to commuters due to the large number of workers who took vacation, worked from home, or altered their work schedules. Anecdotal evidence exists that some employers allowed employees to leave work early, which would represent lost productivity if their pay was not reduced proportionally. Although anecdotal reports of early business closures bear a strong impression, the results of a commuter survey conducted by the Suffolk University Political Research Center (SUPRC) fail to confirm these
stories. Therefore, we adjusted the lost productivity figure from our previously reported estimate of $36.7 million to zero.

**Commuters**

Some Boston businesses did suffer a loss of sales from those regular Boston commuters who stayed away during the convention. Certainly a number of eateries lost business due to workers who chose not to come into the city. A BHI commissioned SUPRC poll of commuters found that, on average, 32% of commuters opted not to commute for the four days of the convention, and that Boston commuters spend an average of $10.19 per day. Based on the traffic and train station counts from our previous studies, we estimate that approximately 575,000 people commute into Boston each day. Based on these assumptions we estimate that Boston lost approximately $7.5 million in commuter spending during the four days of the convention. Some of this lost commuter spending would have been picked up by surrounding communities as some commuters that stayed home spent money in their home towns. But some of this spending is lost.

**Table 3: Loss of Commuter Spending**

<table>
<thead>
<tr>
<th>Daily Commuters</th>
<th>Stayed Home</th>
<th>Commuters that Stayed Home</th>
<th>Spending Per Day</th>
<th>Days</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>575,000</td>
<td>32%</td>
<td>184,000</td>
<td>$10.19</td>
<td>4</td>
<td>$7,499,840</td>
</tr>
</tbody>
</table>

**Using IMPLAN**

IMPLAN provides regional industry multipliers, which enable the user to provide detailed analyses of the direct, indirect and induced economic impacts on the local economy of a change in final demand for certain industries.

IMPLAN multipliers are designed to model a variety of scenarios and are traditionally used to model a shock to a regional economy. Examples of uses of the model include opening or closing military bases, new energy facilities, new sports stadiums, opening or closing manufacturing plants and airport or port facilities. All these scenarios are modeled by estimating changes in final demand by industry and entering them into the IMPLAN model for the region.
Any systematic analysis of economic impacts must account for the inter-industry relationships within a region. IMPLAN, accounts for inter-industry relationships through the use of a regional transaction table that is algebraically manipulated to produce a set of regional multipliers.

Convention attendees’ spending and the spending by the host committee (including security and private parties) serve as the shock to the Boston economy, i.e. the change in final demand. Likewise IMPLAN can be used to calculate the negative impact of lost spending due to events and lost tourism. These changes are entered into IMPLAN and used to calculate the impact on output, value added and labor income by industry in the local economy. IMPLAN is available at the county level and can be used for a multiple county region as long as the counties are contiguous.

IMPLAN captures the direct effects of changes in final demand and local purchases made by local companies as a result of this increase in final demand. Because IMPLAN is based on regional industry multipliers it will also capture the ancillary effects arising from the income earned from the local companies’ input purchases. This allows BHI to provide a complete analysis of the Democratic National Convention’s economic impact on the Boston metropolitan area, as local companies’ transactions ripple through the local economy.

IMPLAN is based on a national transaction table that is regionally adjusted through the use of Regional Purchase Coefficients (RPC). RPC’s represent the portion of local demand purchased from local producers. Once the transaction table is regionalized, a coefficient matrix is derived by dividing each industry column by the column total. This coefficient matrix is also called the A matrix. Through the algebraic manipulation performed below the regional multipliers are derived:

\[ X = (I - A)^{-1} Y, \]

where

\( X = \) Industry output,
\( I = \) Identity matrix,
\( A = \) A matrix,
\( Y = \) Final Demand.

Our analysis accounts for changes \( Y \), in the form of spending by convention attendees and Host Committee expenditures. After we apportioned these changes in final demand by industry as
documented above, we use IMPLAN to determine how output and value added changes throughout the economy.

3 City of Boston, A Correction to Recent Claims of Negative Economic Impact of the 2004 Democratic National Convention in Boston, June 25, 2004, p. 4.