


2006

# 2010 Olympics Spillover into Washington

Border Policy Research Institute

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## Recommended Citation

Border Policy Research Institute, "2010 Olympics Spillover into Washington" (2006). *Border Policy Research Institute Publications*. 50. [https://cedar.wwu.edu/bpri\\_publications/50](https://cedar.wwu.edu/bpri_publications/50)

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**Introduction.** The 2010 Winter Olympics will take place in Vancouver, British Columbia, 30 miles north of the Canada – U.S. border. Vancouver is the northern terminus of a high-way corridor that extends south to nearby cities in Washington State, including Bellingham, Mt. Vernon, Everett, and Seattle. Based upon existing analyses and data, together with knowledge gained from prior Olympic games, this report discusses certain cross-border Olympics-related impacts that could occur along that corridor. The report focuses upon the period immediately surrounding the games, but includes brief comments regarding pre- and post-games effects.

**Profile of Attendees.** Attendees at the Olympics are broadly divided into two categories: spectators and participants. In this context, “participants” refers not only to athletes and coaches, but also to the many people involved in organizing, sponsoring, broadcasting, and judging the games. Table 1 shows the number of beds/rooms that the International Olympic Committee (IOC) required Vancouver to make available in order to accommodate participants. It is likely that the table contains a prudent overestimation of the hotel rooms that the participants will actually fill. Still, after accounting for multiple-occupancy of some rooms, the table corresponds reasonably well with the value of 22,850 participants as reported for the Salt Lake games.<sup>1</sup>

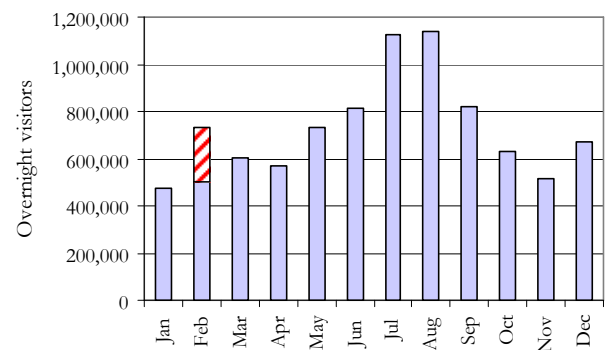
The number of spectators can vary widely from one games to the next. At Salt Lake City and Turin, for example, spectator ticket sales amounted to 1,525,000 and 930,000 tickets respectively. The Vancouver organizers anticipate sales of 1.4 million tickets. Of course, a great many tickets are sold to residents of the host city, and these resident attendees are of no consequence to this analysis. It is the out-of-area attendees that could impact hotels, roads, and airports in Washington.

At the Salt Lake games, about 60 percent of the tickets were

sold to out-of-area visitors, the average spectator used four tickets, and the average length of stay was 3.5 days.<sup>2</sup> If the same ratios hold true in Vancouver, a total of 210,000 out-of-area spectators will visit during the 17-day span of the games, resulting in a per-day average of about 43,000 out-of-area spectators. A report commissioned by Washington Tourism identifies a low-end estimate of 108,000 out-of-area spectators, relying upon the ratios of six tickets per spectator and 40 percent out-of-area sales.<sup>3</sup> For the balance of this report we will use a value of 210,000 out-of-area spectators, together with a value of 25,000 participants. These values provide a reasonable estimate of the impacts that could occur.

**Accommodation Spillover.** Figure 1 reveals how the expected volume of visitors to the Olympics compares to Vancouver’s existing pattern of overnight visitation. The figure shows the monthly volume of overnight visitors to Vancouver in 2005, with 235,000 extra visitors added to the February column. The Olympics will generate a visitor burden that is smaller than the one routinely accommodated by Vancouver in the peak tourist season from June through September.

**Figure 1. Overnight Visitation to Vancouver by Month, 2005**



Source: Tourism Vancouver

A closer analysis of hotel capacities corroborates the picture. As of early 2006, there were at least 24,608 hotel rooms available in the Greater Vancouver area, about 1,100 more in the adjacent cities of Abbotsford and Mission, B.C.,<sup>4</sup> and 5,973 in Whistler.<sup>5</sup> An additional 2,186 rooms are under construction in or near Vancouver, with completion dates well prior to the Olympics.<sup>6</sup> As of 2003, at the time their bid was submitted, the Vancouver organizers had reserved 16,789 rooms for participants.<sup>7</sup> Combining all of the above, about 17,000 rooms appear to be available for non-participants. This total is augmented by an estimated 1,200 beds in hostels, and by the 6,000-bed capacity of the cruise ships that are expected to offer event-related visits to Vancouver during the games.<sup>8</sup> Under the conservative assumption that each hotel room will house

**Table 1. Accommodations Required by IOC**

	Beds in athlete villages	Hotel rooms
Athletes & team officials	3,750	
Other officials	600	
Judges & observers		640
Olympic Family & guests*		3,150
Media		9,000
Sponsors & staff		3,700
<b>Total</b>	<b>4,350</b>	<b>16,490</b>

**Combined beds/rooms 20,840**

Source: Vancouver 2010 Bid Book

\**Olympic Family* is the IOC’s phrase describing members of the international sports federations, the national Olympic committees, and the IOC itself.

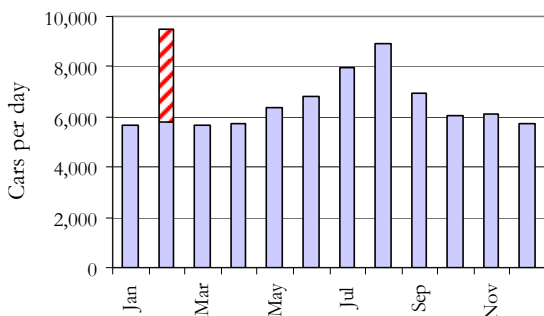
only two people, an inventory of over 41,000 beds will be available in Vancouver and its environs. Displacement of non-games-related visits is a well-documented phenomenon at prior events, so it is likely that the great bulk of the inventory will be available for spectators. Another well-documented phenomenon is the tendency of out-of-area visitors to arrange accommodation other than in hotels. At the Calgary and Atlanta games, *half* of the out-of-area visitors stayed with friends and relatives.<sup>9</sup>

Thus far, we have shown that about 41,000 beds will be available to non-participants, which roughly equals the value of 43,000 out-of-area spectators anticipated per day. But very prudent assumptions underlie this comparison. If the number of visitors is smaller (recall the vastly lower estimate in the Washington Tourism report), if a significant fraction of visitors stay with friends and family, and if hotels accommodate more than two persons per room, then the Vancouver-area room-inventory will be well in excess of demand. There appears to be little reason to expect a spillover of overnight visitors into Washington.

**Traffic Spillover.** The Whatcom Council of Governments (WCOG) analyzed the extent to which games-related traffic will result in congestion along the I-5 corridor that connects Seattle to Vancouver, with particular emphasis upon the situation at the international border. WCOG's analysis was intended to show a worst-case scenario. For example, WCOG assumed that *all* of the available 1.8 million tickets would be sold (as opposed to the 1.4 million figure now adopted by the organizers), and that out-of-area spectators would amount to 75 percent of the total (as opposed to the 60 percent figure we use above).<sup>10</sup> Under these assumptions, the number of out-of-area spectators is 46 percent greater than the 210,000-person value that we developed earlier, and 184 percent greater than the low-end estimate in the Washington Tourism report.

WCOG concluded that the added traffic burden imposed at the border would be 3,696 cars in each direction. There are two crossings that typically handle the flow at the northern terminus of I-5 (Peace Arch and Pacific Highway), and Figure 2 shows the average daily one-way flow by month for the two combined in the year 2003. As before, the expected new traffic is shown as an addition to the February column. The figure shows an anticipated traffic burden slightly greater than the peak volume routinely experienced in the summer.

**Figure 2. Daily Car Traffic by Month, Peace Arch and Pacific Highway Combined, 2003**



Sources: U.S. Customs and Border Protection, Statistics Canada

The WCOG report also notes that the border-crossing infrastructure has in the past handled volumes much higher than shown in Figure 2. As an example, in 1995 the flow for the two crossings combined exceeded 10,000 cars per day (the upper limit of Figure 2) for the entire 9-month period from March through November. Finally, it is worth noting that 3,696 cars amounts to about 13 percent of the average daily traffic volume passing through Bellingham on I-5.<sup>11</sup>

WCOG applied worst-case assumptions and demonstrated that border congestion during the games would be roughly equivalent to that experienced on a peak summer day. It is unlikely that conditions will match the extremes contemplated by WCOG, so significant traffic congestion in Washington does not seem probable. The key to accommodating traffic will be adequate border staffing. U.S. Customs and Border Protection is aware of the upcoming event and has presented a report to Congress describing an intent to augment staffing as necessary.<sup>12</sup>

**Airport Spillover.** The capacity of the Vancouver Airport (YVR) can be compared to the expected pattern of travel associated with the Olympics. We earlier developed an estimate of 210,000 out-of-area spectators and 25,000 participants. For an average day mid-way through the games, this amounts to about 13,000 arrivals and an identical number of departures (assuming that most *participants* stay for the duration of the games). Much of this travel will be by car, as evidenced by WCOG's conclusion that 7,500+ persons (3,696 cars @ 2.05 persons per car) would arrive each day along the I-5 corridor alone. As a very rough estimate, we subtract 7,500 auto passengers from 13,000 total arrivals, resulting in 5,500 arrivals per day by air (matched by the same number of departures). Admittedly, WCOG adopted assumptions resulting in a very high car-count (which would otherwise imply an unreasonably low air-travel count), but this is balanced by the fact that many cars will travel to Vancouver via routes other than I-5. In February, YVR handles an average daily passenger load (arrivals + departures) of about 41,000, and this value rises to 56,000 for a peak summer day.<sup>13</sup> The two-way games-related traffic load (on an average day midway through the games) therefore appears to amount to about one-fifth of YVR's peak-day capacity. As noted earlier, travel displacement is common during the Olympics, so it is likely that non-games-related traffic will be lower than normal.

The air travel associated with the opening and the closing of the Olympics will be more intense because of the need to accommodate the wave of traffic that brings attendance up to (and down from) mid-games steady-state levels. Applying the air traveler proportion used earlier (i.e., 5,500 per 13,000) to the entire pool of participants, together with a full day's contingent of spectators, yields a value of 29,000 arrivals. With a peak-day capacity of 28,000 arrivals, YVR will be capable of handling the influx only if the majority of non-games-related travel is displaced and the influx is spread over 2+ days. It seems likely that other airports, including SEATAC, will capture games-related traffic and displaced traffic in the days surrounding the opening and closing of the Olympics.

**Pre- and Post-Games Effects.** It is commonly held that a host city experiences increased tourism in the years prior to and after an Olympics, due to a greater global awareness of

the city. Research commissioned by the Vancouver organizers provides some estimate of this effect.<sup>14</sup> In the “medium-high” scenario, it is estimated that the Olympics will attract an additional 2.7 million international visitors to British Columbia over the 8-year span from 2008 through 2015. This represents a modest increase of 3.4 percent over the baseline value of 80+ million international visitors otherwise predicted for that period.

Research commissioned by Washington Tourism describes games-related visitation to B.C. as “relatively minor” and advises against the idea of Washingtonians undertaking promotional efforts targeted solely at such visitors.<sup>15</sup> The report instead supports the concept of marketing Washington as a place for teams to practice in the year preceding the games. Extensive effort far prior to 2010 would be needed to persuade teams to follow such a course.

One final kind of pre-games impact deserves mention. The imminence of the Olympics has helped generate the political will to secure funding for major highway projects in northern Washington and southern B.C., all of which are to be constructed prior to 2010. Notable examples include the rebuilding of the road approaching the Pacific Highway crossing (which will result in the closure of one existing northbound lane for five months); the rebuilding of the approach road and port-of-entry building at the Peace Arch crossing (also resulting in lane closures); the rebuilding of Guide Meridian (State Route 539). The economies of some communities along the I-5 corridor are significantly dependent upon cross-border commerce, such that any substantial reduction in the number of Canadian visitors is problematic. By dissuading some Canadian visitation, it is likely that these road projects will unintentionally harm the economies of some Washington communities in the period prior to the Olympics.

**Conclusion.** With regard to three kinds of possible cross-border effects associated with the 2010 Olympics, there is variability to the impacts that Washingtonians will experience. Little spillover in hotel usage is expected because of the large inventory of accommodation in Vancouver. Border-related auto congestion could be quite high for a mid-winter month, but no worse than typical summer peak volumes. Congestion at the Vancouver Airport in the opening and closing days of the games could cause significant displacement of travelers to other airports, including the Seattle/Tacoma airport.

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- 7 See note 5.
- 8 See note 5.
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- 14 See note 9.
- 15 See note 3.