When Does The Flame Extinguish? : The Legacy of the French Winter Olympics
Quand est que la flamme Olympique s'éteint? : Le patrimoine des Jeux Olympique d'Hiver en France

An essay submitted in partial fulfillment of the requirements for graduation from the Honors College at the College of Charleston with a Bachelor of Science in Hospitality & Tourism Management and Business Administration

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Introduction

The Russian Government has spent an estimated $51 billion on the 2014 Sochi Olympics (Rivait and Barr, 2014, para.1), and when a government invests that much money, they are expecting substantial results which are supposed to last and pay dividends for years to come. This outcome is not guaranteed, which begs the question of the validity of hosting this icy mega-event.

The Olympic Games are a monumental event for a city to undertake. Not only is there glory at stake for a great price, there is also the opportunity to enter the world stage, or change one’s reputation. One of the major justifications which fuels the hosting of a mega-event, especially the Olympic Games, are the purported benefits; economic or otherwise, which supposedly make everything worthwhile, (Hiller, 1998, p. 47; Gratton, Shibli, & Coleman, 2006, p. 44). Many cities worldwide vie for the chance to host the games and bring honor to themselves and their country. Hosts believe that the expenses will reward the city handsomely with social and economic benefits, (Gratton et al., 2006, p. 41). In 1924, the debut of the Winter Olympics, both incarnations of the games were held in the same country. Post WWII, the Winter and Summer Games were still held during the same year, but with different nations hosting. The last instance of the Winter and Summer Games occurring in the same year was 1992; afterwards they alternate every two years.

The Winter Olympics are substantially different from the Summer Games. Although the Winter games are often overlooked in comparison to the larger Summer Games, they provide a unique atmosphere and benefits. The Summer vs. Winter Games are two sides of the same coin and should never be compared to prevent biases. Most of the research, which attempts to track the benefits and costs of the games, focuses on Summer Olympic venues, (Kang & Perdue, 1994,
p. 207; Li & Kaplanidou, 2013, p. 237). This project focuses on the Winter Olympics because the major differences beg the question if hosting is a worthwhile venture for any city to accept.

The post-Olympic effects have been studied by many researchers with mixed results, (Essex & Chalkley, 2004, p. 205), though hosting committees often focus on economic impact when the benefits of hosting are weighed. Some studies, however; have suggested that guests of these events do not spend locally, making the long term economic benefits moot, (Lee & Taylor, 2005, p. 596). The real issue is that these events are difficult to codify for analysis and as a result they cannot always be measured on a traditional basis of profit and loss, (Gratton et al., 2006, p. 44). The physical manifestations of an event are often a good meter for how the city has marketed themselves post event, as well as a long lasting measure of their commitment to the Olympic heritage. Beyond the economic impacts, a number of researchers have focused on social impacts for the host, but what is rarely examined is the long term effects of these mega-events across multiple areas of interest. Some studies last from 4-8 years, but in regards to a mega-event, such as the Olympics, the legacy lasts much longer and hence should be studied to record the changes over time, (Kang & Perdue, 1994, p. 207; Li & Kaplanidou, 2013, p. 239). France has hosted five modern Olympic Games, three in the winter, and two in the summer. These three Winter Games occurred in 1924, 1968, and 1992, making the range from the present, 90, 46, and 22 years respectively. This span of Winter Olympics should provide an accurate answer to the question of if the Olympic heritage lasts or degrades over time.

For the amount of money people invest in this venture, it would be worthwhile to know if it will have the lasting effect they desire or any impact at all. The prestige will always be present, but prestige does not repay the hosting costs.
**Literature Review**

The Winter Olympics has always been the less studied portion of the Olympic spectacle. There has already been a plethora of research done on the Summer Games, as well as the short term impact of these mega-events, but a state does not invest the amount of money in either the Winter or Summer Olympics with the intention of the benefits only lasting for a short period of time. Li and McCabe created a framework in their 2013 paper which was intended to measure the long term effects of a mega-event; unfortunately this is only a theoretical framework which was not tested. This study intends to modify their structure so that the categories are easily measurable. With the modified framework, this study will be able to go further and finally analyze the duration of the effects of the Winter Olympics.

The work of ShiNa Li and Scott McCabe (2013), created a framework for defining and evaluating legacies of mega-events (Figure 1). First, one has to note that the model has not been empirically tested. Their model focuses upon three main areas, economic, physical, and psychological well-being, which exists as definitions under the heading of tangible and intangible. Economic Well-Being includes such factors as GDP, employment and welfare. Physical Well-Being has the dimensions of health, environment, mass sports infrastructures, and politics. Thirdly, psychological well-being contains civic pride, community cohesion, and national identity. The next level of the model is how these traits create legacies and the authors’ suggestions for measurement. Not surprisingly economic well-being translates to economic legacies and psychological well-being leads to social legacies, but right in the middle of these is physical well-being becoming compounding legacies. Li and McCabe (2013) suggest 6 methods of measuring these legacies via induced tourism, stadiums, economic activities, awareness levels, image levels, and social costs and benefits, but oddly, they claim that there was no accurate way
to measure the effects of compounding legacies which can supposedly be characterized through the environment, politics, and health. According to Li and McCabe’s (2013) article, mega-events can generate economic, socio-cultural, and destination image impacts.

*Figure 1- Li & McCabe’s 2013 Framework for Evaluating Legacies*

There is a second graphic included in this article which states that the strength of economic legacies differ from that of non-economic legacies over time. This sound idea resonates, as it is presented where these non-economic legacies begin weaker than their economic counterparts, but then reach a steady level of strength in the long term. Simultaneously, the economic legacies react inversely to these non-economic legacies and approach zero in the long term phase.
Although this is a well thought out model, there are a few gaps which provide us with opportunities. The main opening begins with the authors suggesting a focus on a conceptual level of understanding because legacies only appear in the long term, hence, there’s not enough data at the present to empirically evaluate their model. Every single form of measurement proscribed in this paper is difficult, yet better suited for the study of impacts if measurement began with the awarding of the Games to a city by the IOC. Any researcher who follows their method will have to wait to see results. Li and McCabe’s (2013) first measure of induced tourism includes a self-admitted issue where tourist visits are often multi-faceted and not usually attributable towards one event or attraction. Then once one has attributed a number towards this slippery ideal, the question of what proportion of the revenue can be credited towards the event arises. When you come to the second measure, it becomes a challenging guessing game to ascribe foreign direct investment towards one event, especially when asked which proportion was the base value vs. the event value. With the fourth measure of destination awareness, in relation to the Olympics, the idea of media related destination awareness raises the question of if media exposure is essential to destination awareness which then flows into querying if all events before the
television of the Games a failure in this respect? Or, should they simply be viewed with a different scale of awareness?

Ritchie’s study of the Calgary Olympics was extensive, but only spanned five years after the event. The sheer scale of the investment in this type of mega-event is begin with the expectation that the benefits of will be reaped for far longer than five years. (Kang & Perdue, 1994, p. 207). Which is why this study stretches the scope of study to 90 years in the past.

In 1924, Chamonix hosted 16 events which is miniscule compared to the 126 which Paris hosted the same year. As of 1968, the gap began to close and Grenoble hosted 35 compared to Mexico City’s 172 events. Finally in 1992, Albertville’s 57 events was only 200 shy of Barcelona’s 257. Figure 3 demonstrates the decline in the gap between the Winter and Summer games over 90 years citing the three French Winter Olympics. On average, the French Winter Olympics have 81.6% fewer events and 64.2% fewer countries participating compared to the summer games which seems to imply that the possible benefits are significantly smaller as well. If this is the case, it raises the question of why a city even goes through the trouble of candidature and the subsequent construction.

*Figure 3 - Scale of Summer (International Olympic Committee, 2013b) vs. Winter Olympics (International Olympic Committee, 2013a)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Summer Events</th>
<th>Winter Events</th>
<th>Percentage Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>1924</td>
<td>126</td>
<td>16</td>
<td>87.3%</td>
</tr>
<tr>
<td>1968</td>
<td>172</td>
<td>35</td>
<td>79.7%</td>
</tr>
<tr>
<td>1992</td>
<td>257</td>
<td>57</td>
<td>77.8%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>Average</td>
<td>81.6%</td>
</tr>
<tr>
<td>Year</td>
<td>Summer Countries Participating</td>
<td>Winter Countries Participating</td>
<td>Percentage Less</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1924</td>
<td>44</td>
<td>16</td>
<td>63.6%</td>
</tr>
<tr>
<td>1968</td>
<td>112</td>
<td>37</td>
<td>67.0%</td>
</tr>
<tr>
<td>1992</td>
<td>169</td>
<td>64</td>
<td>62.1%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td></td>
<td>64.2%</td>
</tr>
</tbody>
</table>

Winter Games are often forgotten outside of the host country, which makes one wonder if the benefits fade with people’s memories. If an Olympic City is using their influence to boost or create tourism, it does not seem prudent to boast and focus marketing efforts on something which people will eventually forget. Li and McCabe’s (2013) idea is the backbone of this study; it combines the best of previous works into an applicable measurement tool. This study tweaked a few of their ideas to make it appropriate for France.

**Economic**

The literature says many things about the economic impacts of mega-events such as the Winter Olympics. Mega-events are usually assessed via economic impacts which is not a surprise because it is the easiest measurement we have at our disposal. (Hiller, 1998, 47). There is a high correlation between spectator admission and economic impact and “such justifications are often backed up by economic impact studies that show that the spending of sports tourists in the host city more than justifies such a public subsidy.” (Gratton et al., 2006, p. 41, p. 51). Unfortunately, some of the people attracted by these events fail to spend money in the local economy; therefore, displacement costs should be counted and subtracted from the gross impact. (Lee & Taylor, 2005, p. 596, p. 601). “The hosting of major sports events is often justified by the host city in terms of long-term economic and social consequences, directly or indirectly resulting
from the staging of the event.” (Gratton et al., 2006, p. 44).

In one study which recorded tourism growth rates 4 years before and after the Olympics, the destination “achieved average tourism growth rates that exceeded the global rate by 2.3% in the four years leading up to the games and 2.2% in the four years following the games.” (Li & Kaplanidou, 2013, p. 239). To determine what tourists to attribute to the event, a baseline must be established, usually based on historical data and forecasts. “A useful and relatively easy measure of the incremental impact of an event is the difference between normal visitor numbers to the area, or occupancy rates, and numbers during the event.” (Getz, 1991, p. 311). Positive experiences at these sporting events may lead to repeat visits. (Gratton et al., 2006, p. 54). As many businesses know, they are more profitable if they have repeat customers as well as a low turnover rate of employees, this holds true for destinations also. These positive experiences can change the image of the destination which more often than not makes the tourist more likely to visit and make an economic impact. The best and most recent example of this is the Beijing Games, “with more than 4.7 billion television viewers – approximately 70% of the world’s population – the Beijing Games set the record as the most viewed Olympic Games ever.” (Li & Kaplanidou, 2013, p. 237). All of the television exposure brought Beijing into the immediate minds of the world.

The 1924 Winter Games were an adjunct to the main point made by the IOC in awarding the Games to France, namely that France, six years after the end of the Great War, was capable of staging a sports mega-event on a world scale and was fully recovered in her political and economic life. (Dauncey, 2012, p. 96).

In the beginning, Brundage, an Olympic official, fought commercialism especially in skiing, and
it is seen now as a blunder. (Renson, 2004, p. 59) Without all the commercialism that is ingrained in the Olympics, most of the host cities would be drowning in more debt than they already are.

France’s third Winter Games were generally perceived to be a success in sporting and political terms, although, as usual, estimates of the overall finances were negative, and the most recent studies conclude that the Games did not provide the durable hoped-for regional economic development benefits. (Dauncey, 2012, p. 99).

Albertville’s “games ended with a $52 million U.S. deficit, of which 75% was paid by the French government and 25% by the Savoie department.” (Renson, 2004, p. 70).

Social

The profile of a city, including the image, reputation, and pride which the residents feel towards the area greatly impacts the tourism. For example, Charleston, SC has been awarded Conde Nast’s #1 City in the US 3 years in a row, and a lot of that is based on the attitudes of residents and the friendliness which they project. This publicity has raised awareness about the city which habitually bolsters the city’s tourism figures. “Increasingly, sports events are part of a broader strategy aimed at raising the profile of a city and therefore success cannot be judged simply on a profit and loss basis.” (Gratton et al., 2006, p. 44). “The success of the South Korean Football team provided the country with a sense of national pride and cohesiveness that no economic impact assessment could ever put a dollar value on.” (Lee & Taylor, 2005, p. 602).

They Olympics, as the ultimate sports event, are seen as the most effective way to augment things like awareness and pride. “Newly constructed event facilities and infrastructure, urban revival, enhanced internal reputation, increased tourism, improved public welfare, additional employment, and increased internal investment.”(Gratton et al., 2006, p. 42) are social factors
which many attribute to mega-events. Another way to measure social impacts are resident attitudes, one researcher “has chronicled and analyzed the impact of the Olympics on host region awareness and resident attitudes and reactions over a 5 year period.” (Kang & Perdue, 1994, p. 207). “Perhaps the major long term benefit would be an attitude change on the part of local businessmen and workers, the development of confidence in one’s ability.” (Getz, 1991, p. 313). without internal pride and support an event is doomed to fail, especially if the residents dislike it; although if the inverse is true, the event will flourish. “Surveys revealed a very high level of support for the event, stemming from the excitement, entertainment value, and the pride that the races generated for Adelaide residents.” (Getz, 1991, p. 312).

The 1968 Winter Olympics were the first televised games; this was the beginning of mass media’s relationship with the Olympics. “Research has found that mass media coverage could affect, even manipulate, people’s international images.” (Li & Kaplanidou, 2013, p. 240). “Grenoble marked the beginning of the media era in the Winter Games.” (Renson, 2004, p. 58) since it was the first televised games. “China was determined to use this mega-event to promote its new national image as a fast-developing, open country boasting rich culture, history and friendly people.” (Li & Kaplanidou, 2013, p. 238). Image is defined as “The sum of beliefs, ideas and impressions that a person has of a destination.” (Li & Kaplanidou, 2013, p. 238) and an image is integral for a destination’s reputation. International visitors to the World Cup had a more positive image of the location post event (Li & Kaplanidou, 2013, p. 240). Habitually absent nationalities can be lured to a destination by their sports team, as illustrated by Lee and Taylor’s research (2005) which said “The nationality of teams playing in South Korea is likely to be linked to the World Cup tourist arrival data.” (p. 601).

Heritage is something which a country can take pride in and show off to others, it is a
part of our history as global citizens; the UN has even declared some sites as protected. “Highly heritage conscious and, as a consequence, somewhat self-referential…post-Games strategies attempt to position those legacies within the specific terms of heritage.” (Gammon, Renshaw, Watertown, 2013, p. 120). The French are very proud of their heritage, as most countries are. National pride is universal, never has a country been truly ashamed as a whole, bad deeds are either viewed differently or blamed on individuals. “The Olympic Games are one of the few events where heritage can be celebrated, created, and memorialized, almost simultaneously…the after, which is often seen as spectacular, world class and capable of generating new heritage.” (Gammon et al., 2013, p. 121), each Olympic host holds a special place in the history books and this heritage is very marketable. “Like many contemporary heritage constructions, sport heritage is imagined largely within the parameters offered by its tourism potential and output…sport heritage is a genuine tourist attraction…phenomenon that intersects with heritage and culture.” (Gammon et al., 2013, p. 120).

The Nordic Games, a predecessor of the Winter Olympics, were “a mixture of nationalistic ideology and commercial marketing.” (Renson, 2004, p. 42). Paris chose Chamonix as the winter host partner since it had already had experience hosting the French Skiing Championships of 1906 and 1908 (Renson, 2004, p. 44). Then for the next set of French Olympics, “Gaullism heavily emphasized French ‘grandeur’ and independence in all domains, and elite sport was identified by the Gaullist state as an instrument of French national prestige.” (Dauncey, 2012, p. 88). De Gaulle was determined to prove France’s strength post WWII, and sports were a non-warlike activity with similar outcomes; one nation is defeated and one is victorious.

The Gaullist inflection to ‘sports policy’ focused on sport and national grandeur through
Olympic success, but interest in medals also came with realization of the significance of sports mega-events as showcases not only of national athletic prowess but also of the organizational genius of the state and the growing modernity of France. (Dauncey, 2012, p. 89).

In terms of the 1968 summer bid,

governance networks in Lyon saw the bid as a bold initiative to enhance Lyon’s status nationally as France’s second city, and also *internationally*, within the context of the new Common Market, and even globally: the global scale of the Olympics could refocus attention on Lyon not just as also-ran to Paris, but as a successful contemporary centre of industry and business (Dauncey, 2012, p. 94).

Unfortunately Lyon lost that chance for the Summer games to Mexico City and France shifted their attention to the Winter Games in Grenoble. The bid for Lyon was meant for national prestige and to create an infrastructure to keep the population healthy. (Dauncey, 2012, p. 90).

“Lyon looked to the Games for upgrades to road, train and airport facilities, planned during the mid-1960s to open the city to the rest of France, Europe and world.” (Dauncey, 2012, p. 95).

Fortunately for Grenoble, all of the infrastructure was allocated towards them.

**Environmental**

Since the environment was not a factor that many people paid attention to in force until the 2000s, most of the Olympic destinations breezed over environmental issues which would concern us today. It was not until 1992 when the IOC stressed “requirements in terms of environmental concerns, sustainable development, and regional development in the medium- and long-terms.” (Dauncey, 2012, p. 101). Before 1992 it was acceptable for the games to ruin the environment. With the IOC’s edict, many people began to ask “is it justifiable for event
organizers to attain their goals or profits at the expense of property damage, noise, traffic congestion, or other disruptions to uninvolved residents? Can ecological damage or pollution be accepted?” (Getz, 1991, p. 313). Similarly, “Greens contested the idea that the Games - or any mega-event? – could not have an unfavorable impact on the local ecology.” (Dauncey, 2012, p. 102). With the Sochi Games still lingering in the back of the world’s minds, this is a prominent concern for everyone, especially as less developed countries begin to host the games. A less developed country does not usually have the rigorous environmental standards of other parts of the world, hence by awarding them the games and expecting them to create infrastructure to first world standards. This often leads to unscrupulous practices to get the job done, and that sets a poor standard for future growth. In 1968 Grenoble, there was a lot of controversy since only a few events were held in Grenoble and the remaining events were held in other locations, requiring that 3 Olympic Villages be constructed. (Renson, 2004, p. 58). When one village can cause so much damage, imagine the impact of 3 villages on the environment. Then in Albertville, they experienced “the worst was the ammonia leak at the La Plagne bobsleigh and luge run. The track was situated in direct sunlight, and therefore ammonia was brought in to freeze the track.” (Renson, 2004, p. 69). If first world countries have these issues, how can third world countries be expected to avoid them?

There are 3 major holes in the current literature surrounding the legacies of mega-events. The first pertains to the Winter Olympics in general, the literature is focused on the Summer Olympics, not the smaller incarnation. This became the major subject of this research project, all three focal points were winter games. Secondly, most of the literature addresses the short term surrounding the awarding and hosting of the Olympics, but without a longer perspective. This was remedied by the usage of three games which are well spaced out over the past 90 years.
Finally, Li and McCabe’s (2013) model is theoretical, it has not been tested on a real Olympic site, and that was one of the goals of this project. We addressed this in our research by asking people about social, economic, and environmental issues in the short, medium and long term, hence plugging the holes.

**Methodology**

This study used methodological triangulation to validate the research gathered. Methodological triangulation was demarcated as one of the four basic types of triangulation by Denzin in 1978, and it is defined as the use of multiple methods to study a single problem, but many researchers in the past decade have begun to argue that crystallization is a better shape for this metaphor. Notably Richardson, who says that “Crystallization provides us with a deepened, complex, thoroughly partial understanding of the topic. Paradoxically, we know more and doubt what we know.” Crystallization is supposed to bring in multiple, seemingly disparate disciplines together to evaluate a problem. (Janesick, 2000, p. 391-392).

According to Fontana and Frey (2000), the golden rules of interviewing include having all the same questions in the same order, a neutral role, not interjecting opinions or judgments, and interested listening to the subject. The challenge of the interviewer is to be casual and friendly, yet simultaneously directive and impersonal. All of the interviews for this project were carried out in this manner, the only changes of subject to the following question occurred when the subject was exhausted on the current subject. There are three types of errors which plague interviews the most, only the second type applies to this project, and that is the error of faulty memories. (Fontana & Frey, 2000, p. 650) The earliest event which the subject was asked to recall was 22 years ago, up to a maximum of 90 years ago, so there is a good chance that some of the data could include minor mistakes. These interviews were not structured interviews because
they did not treat the interview like a strictly scheduled event, all of the questions were open ended making it more similar to an ethnographic, in depth interview. (Fontana & Frey, 2000, p. 652). Ethnographic surveys are best for understanding complex behaviors of the members of a society. (Fontana & Frey, 2000, p. 653). Another possible error can occur based on language barriers. Freeman (1983) says that researchers who rely on interpreters are vulnerable to added layers of bias, meanings, and interpretations, which can lead to disastrous misunderstandings, this was circumvented by the interviews being conducted in French and translated to English by the author. A few of the interviews were conducted via Skype, which has been called a subpar method of interviewing because it lacks face to face contact and blocks social cues, I disagree because of the advances in technology which allowed almost identical situations from the other interviews. (Fontana & Frey, 2000, p. 666).

Interview data can offer “an authentic gaze into the soul of another” or according to Gubrium (1993) and Voysey (1975) the “analysis of culturally rich methods through which interviewers and interviewees...generate plausible accounts of the world.” Silverman argues that the two can be reconciled into a method of analysis which has further depth and merit than either of the two separately. (Silverman, 2000, p. 822-823).

Our qualitative data was changed from audio to text which was then used as a proxy for experience. The free-flowing text of our interviews uses the analysis of words and codes such as key-words-in-context, word counts, and coding, as illustrated in Figure 4 (Ryan & Russell, 2000, p. 771). Key-words-in-context is the search of keywords and then analyzing them with a few of the surrounding words to find themes in the data while counts just study the popularity of these trigger words to see how frequently they occur and what that points to. (Ryan & Russell, 2000, p. 775). Coding was conducted in addition to KWIC and counts to extrapolate and organize the data
The main goal of this project is to determine the long term sustainability of these mega-events. The triple bottom line is the standard for evaluating this query, and is comparable to the Balanced Scorecard for businesses, which essentially is a method of measurement which makes the pros and cons of each segment visible so that a business can ensure that success in one area does not come at the expense of another, for example fiscal success over the environment. We intended to discover which parts of the triple bottom line seemed to last the longest.

All of the interviewees were asked the same questions, and had their answers recorded on
a digital recorder. These were then transcribed from French, and then the French was translated into English. Once there were English written texts available, we counted the existence of keywords which fit under the three main categories of economic, social, and environmental. Each example of these words and the phrase they were a part of was then coded for the three categories. All the coding for the interviews was checked in a double blind fashion. Closed coding was used because the literature is extensive and pre-existing. In closed coding, themes were laid out by the original framework and then we geared the questions towards the triple bottom line and coded the results.

Li and McCabe’s (2013) model was the inspiration for this research project, but with some minor adjustments to improve the feasibility and solve aforementioned issues. To commence, we chose a location which has hosted the games multiple times, to create a constant for comparing data, the Rhone-Alpes Region. The study consisted of a 22 question interview with various people previously involved with the 1924, 1968, and 1992 Winter Olympics. Once establishing the survey, the next step was finding people close enough to the Olympics who could provide the necessary insight. The interviewees include Directors of the Offices of Tourism as well as local business owners and organizers from the Olympic Games.

From the research discussed in the Literature Review, different thoughts pertaining to the triple bottom line emerged. To delve further into those ideas we asked the interviewees the questions detailed in Addendum 1.

**Results**

When coding each branch of the triple bottom line included different keywords relating to the subject. Economic was classified as anything relating to business, the economy, or tourism. Social included infrastructure, equipment, installations, reputations, pride, and image.
Thirdly, the environment was characterized by mentions of green, nature, or the mountains and lakes which make Savoie beautiful.

Usually infrastructure can be a mercurial subject in terms of the triple bottom line with regards to the fact that it can land under the category of economic or social, even occasionally in the environment when considering the impact of building new buildings. Originally we included infrastructure and installations in the economic category, as it appeared in Li and McCabe’s (2013) model, but after conducting the interviews and analyzing the data, we decided to split infrastructure into two distinct categories. I would like to argue that infrastructure as a whole can have economic and social impacts, for example the creation of a stadium can draw events and tourists which bring money to a city, while simultaneously allowing for more locals to use the facility for exercise. Trains can facilitate travel, but are not be the driving factor of a guest’s visit; concurrently residents will benefit daily from safer and better roads and trams.

Transportation infrastructure has a larger impact on the lives of residents who use the roads and trains everyday while sports infrastructure has a larger impact on tourist; therefore, I propose the use of sports infrastructure as an economic construct and transportational infrastructure as a social effect. Upon further reflection of Li and McCabe’s 2013 model, mass sports infrastructures falls under the definition of physical well-being with the largest arrow contributing to compounding legacies with equally smaller arrows towards economic and social legacies. Proposition 2 under economic relates to stadiums and facilities, so that will be the sports infrastructures while proposition 6 is about social benefits and costs, this is where transportational infrastructure comes into play. Under compounding legacies between these two falls the environment, politics, and health. Both forms of infrastructure have an impact on the environment with their creation and health with relation to resident safety and exercise.
After the original counting, we went back to separate the two types of infrastructure that has different impacts. That slightly modified the proportions of each category, putting social in first overall, economic in second, and environmental in third place. When broken down by city, Albertville had an almost even split between the three categories with economic slightly lower at 31%. In Grenoble, social was 37% of mentions with economic 2% lower and environmental in last place with 28%. Finally with Chamonix, economic dominated the mentions with 63% and environmental was last with 13% and social double that figure.

**Figure 5 - Counting Mentions**

<table>
<thead>
<tr>
<th></th>
<th>Albertville</th>
<th>%</th>
<th>Grenoble</th>
<th>%</th>
<th>Chamonix</th>
<th>%</th>
<th>Total</th>
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<tr>
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<td>30</td>
<td>37%</td>
<td>4</td>
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<td>89</td>
</tr>
<tr>
<td>Environmental</td>
<td>55</td>
<td>34%</td>
<td>23</td>
<td>28%</td>
<td>2</td>
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<tr>
<td>Total</td>
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<td>81</td>
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<td>88</td>
</tr>
</tbody>
</table>

**Discussion**

The literature previously reviewed emphasizes the usage of economic measurement tools to evaluate mega-events. They use tourist numbers and commercialization mostly, and the only time that was addressed in the was when one subject said that they can only track frequention of visitors who come to the visitors center and ask, otherwise there’s no way to determine the reason for the visit. One said “I think nowadays there must be a very very faint part of the people going to visit Grenoble because of the Olympic Games.” This was echoed in the other two cities as well.

Social legacies use awareness, raising the city’s profile, regardless of profits and loss. An Albertvillois who now owns a hotel in Grenoble says that he’ll always tell people about his
Olympic experiences until his dying day because they were so profound, he also keeps some of his souvenirs in a safe. Urban revival and public infrastructure, are also used as measures for social legacies and this is evident in Albertville where a business owner said there used to be no sidewalks and the buildings along the main street used to be black and dreary, now they’re renovated and colorful. The roads in Albertville have not only made the commute from the ski resorts more tolerable time wise, but also safer.

The only real environmental discussions which came up in the literature was the International Olympic Committee’s edict about the environmental preservation in 1992. Disruptions to uninvolved residents are also considered an environmental impact, always some kind of impact. Most of the people surveyed could not name a specific event which was environmentally harmful, and none who experienced the games first hand seemed put off by them. One did mention that the Arles river which runs through Albertville was cleaner because of the IOC’s requirements for treating the water.

Li and McCabe’s (2013) model focuses upon three main tangible and intangible measures, economic, physical, and psychological well-being. The next level of the model pertains to how these traits create legacies and the authors’ suggestions for measurement. Li and McCabe (2013) suggest 6 methods of measuring these legacies via induced tourism, stadiums, economic activities, awareness levels, image levels, and social costs and benefits; finally compounding legacies which can be characterized through the environment, politics, and health. Li and McCabe’s (2013) second graphic states that non-economic legacies begin weaker than their economic counterparts, but then reach a steady level of strength in the long term. Simultaneously, the economic legacies react inversely to these non-economic legacies and approach zero in the long term phase. Although the total counts were neck in neck, overall for
our counting, social had the most mentions with economic in second and environmental last. When the non-economic legacies are combined, it mirrors the second figure where in economic does not last nearly as long as social or environmental. This proves how the categories fade from the memories after an extended period of time.

Since it was difficult to find anyone in Chamonix to discuss an event which occurred 90 years ago, we also averaged the number of mentions which the coding found to make the comparisons between Albertville, Grenoble, and Chamonix more equal. Even with that, the economic mentions are distorted mostly because when the director of the Office of Chamonix’s Tourism was discussing the infrastructure, he listed the different structures which were constructed. Although this makes it seem like economic legacies spike after 90 years, he was just very repetitive, skewing the data, even though he mentioned that the infrastructures are not used at all anymore. Economic counts gained a boost across the board when infrastructure was split between the two categories, but most of the talk was about how useless the facilities became afterwards, with few exceptions. Many of the subjects specifically mentioned that they only saw the economic impacts for their businesses or the economy in general for the first 5 subsequent years, after that any economic impacts were negligible, excluding the wastefulness of many sports infrastructures.

Overall environmental concerns increased in recent years, and this is attributable to the IOC edict which regulated the environmental impacts of host cities. Many of the economic mentions were tied to people describing why their city was awarded the city in the first place, or what has sustained their tourism after the games. The Savoie region is beautiful and it is easy to see why it has a touristic appeal of its own. The games then did not do much to preserve the environment which was so well loved and integral to their tourism until 1992 when it was written
into the charters, even then the IOC only discouraged the blatant destruction of the environment, all infrastructure has some sort of environmental impact...except in Chamonix where they made some of their structures from snow.

Social mentions declined at a slower rate than the environmental concerns mirroring Figure 2 from Li and McCabe’s 2013 model. The residents of the cities were very proud of their Olympic heritage, but it seemed to not be enough that they’d tell everyone about it; although one woman described it well, saying that all her friends and relatives already know that she works/lives in a city which hosted the games, hence there’s no reason to repeat it.

**Figure 6 - Coding Average Mentions**

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<th>Grenoble</th>
<th>Chamonix</th>
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<tr>
<td><strong>Average Economic</strong></td>
<td>7.1</td>
<td>5.6</td>
<td>10</td>
</tr>
<tr>
<td><strong>Average Social</strong></td>
<td>7.9</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td><strong>Average Environmental</strong></td>
<td>7.9</td>
<td>4.6</td>
<td>2</td>
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</table>

**Limitations and Recommendations**

This research was as comprehensive as possible, but with that being said there were still some unavoidable missteps. Chamonix hosted the 1924 Games 90 years ago, it was nigh impossible to find anyone informed enough about the event to provide an accurate insight. If estimating an average lifespan of 100 years old, a potential interviewee would have to have been at least 10 years old to remember some part of the games and still be alive to discuss it, although the accuracy of their memory at the current advanced age would be dubious. For this reason we only interviewed the head of the Office of Tourism in Chamonix because of his access to historical data and interest in the subject.

This issue of finding credible subjects continued into Grenoble where some of our subjects were only 4 years old at the time of the games. This was mitigated by the fact that they now work in an environment which is infused with the essence of the 68 Games, such as the
COLJOG and the MC2, Conservatoire, Observatoire, Laboratoire des Jeux Olympique de Grenoble and Maison de Culture 2 respectively. These subjects have the benefits of firsthand experience with the event as well as the research knowledge to supplement that. In Albertville, there were no shortage of people who remembered the games, but we still attempted to supplement them with others who had the dual experience and research perspective, such as the Director of the Office of Sports.

Another pitfall included the economic data which this project originally sought. Chamonix did not have records going back 90 years with exact data on hotels and ADR; Grenoble had some general data, but not what we were looking for. Also it was all in the new francs, not euros, nor the old francs of Chamonix’s Olympics. For Albertville, they did not keep the data in house, it was all at the INSEE, but it seemed useless to gather this data for Albertville when there would be no possible comparison to Grenoble or Chamonix.

Anyone looking to expand this project should first go to the INSEE to gather what data is available from the three Winter Olympic Cities. They should also attempt to find an equal number of credible sources from each city, instead of having them skewed towards the present.

**Conclusion**

Over a 90 year period, non-economic legacies have more staying power than that of economic legacies which mainly impact the short term. If a country is considering candidature, they should keep in mind that the economic benefits will not equal the investment which was used to create the mega-event, but that the social and environmental results will be more valuable than any amount of cash. Those who are only interested in monetary gains, should find a different event to host, but those interested in improving their country while gaining prestige and glory should certainly apply for candidature to the International Olympic Committee. A country
will reap strong social benefits from either incarnation of the games. If a country was debating the summer games vs. the winter games, I would suggest using existing structures as much as possible to mitigate costs, if the country has more winter resorts and infrastructure, then that should be their focus, otherwise the country should host a summer games. As less traditional superpowers host the Olympics, the environment should be a serious concern, if it is not preserved, then the gem which won you the games will be destroyed at the expense of them.
References


### Addendum 1 - Interview Questions

#### Social and Environmental Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Inspiration</th>
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</thead>
<tbody>
<tr>
<td>1.  When talking to your friends about your city, do you still mention the fact that it was an Olympic city? If no, please estimate when you stopped telling them.</td>
<td>A Korean Tourism journal evaluated resident perceptions, visitor perceptions, and the magnitude of tourism to Korea. (Kang and Perdue 207)</td>
</tr>
<tr>
<td>2.  Does it give you pride to know that your city hosted the Olympics?</td>
<td>“such as increases in tourism, urban infrastructural improvements, or the more intangible benefits of civic pride, boosterism, and international image build up.” (Hiller 47)</td>
</tr>
<tr>
<td>3.  Do you recommend your city to your friends for visiting?</td>
<td>“Surveys revealed a very high level of support for the event, stemming from the excitement, entertainment value, and the pride that the races generated for Adelaide residents.” (Getz 312)</td>
</tr>
<tr>
<td>4.  At this date do you still believe that the Olympics impact your local tourism?</td>
<td>“Has chronicled and analyzed the impact of the Olympics on host region awareness and resident attitudes and reactions over a 5 year period.” (Kang and Perdue 207)</td>
</tr>
<tr>
<td>5.  Are there still Olympic facilities in use? Are these facilities used for tourism or community events?</td>
<td>“Ski slopes and ice sports facilities can have tourist and recreational functions and so usually contribute to winter tourism and community amenities after the Games. Some facilities…have limited use outside international competitions.” (Essex and Chalkley 206)</td>
</tr>
<tr>
<td>6.  What percentage of the guests would you estimate are drawn by the fact that this was an Olympic city?</td>
<td>“Has chronicled and analyzed the impact of the Olympics on host region awareness and resident attitudes and reactions over a 5 year period.” (Kang and Perdue 207)</td>
</tr>
<tr>
<td>7.  Did your city gain a ski reputation because of the Olympics?</td>
<td>“Ski slopes and ice sports facilities can have tourist and recreational functions and so usually contribute to winter tourism and community amenities after the Games. Some facilities…have limited use outside international competitions.” (Essex and Chalkley 206)</td>
</tr>
<tr>
<td>8.  Do you know of any negative</td>
<td>“Is it justifiable for event organizers to...”</td>
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<td>Question</td>
<td>Answer</td>
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<td>--------------------------------------------------------------------------------------------------</td>
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<tr>
<td>environmental impacts from the Olympics?</td>
<td>attain their goals or profits at the expense of property damage, noise, traffic congestion, or other disruptions to uninvolved residents? Can ecological damage or pollution be accepted?&quot; (Getz 313)</td>
</tr>
<tr>
<td>9. Has research ever been done about the economic impact of the Olympics here? If so, what was the result? Do you agree with this result?</td>
<td>Mega-events are usually assessed via economic impacts. (Hiller 47)</td>
</tr>
<tr>
<td>10. What piece of Olympic infrastructure do you believe has been the most beneficial to the city? What about the most useless?</td>
<td>“Ski slopes and ice sports facilities can have tourist and recreational functions and so usually contribute to winter tourism and community amenities after the Games. Some facilities…have limited use outside international competitions.” (Essex and Chalkley 206)</td>
</tr>
<tr>
<td>11. Were you here during the Olympics? If so, did they make you proud?</td>
<td>“Has chronicled and analyzed the impact of the Olympics on host region awareness and resident attitudes and reactions over a 5 year period.” (Kang and Perdue 207)</td>
</tr>
<tr>
<td>12. Do you have any souvenirs from the Olympics?</td>
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<tr>
<td>13. If you could change one thing about the Olympics here, what would it be? Why?</td>
<td></td>
</tr>
<tr>
<td>14. Do you own a business here, if so have you noticed any changes which you attribute to the Olympics?</td>
<td>A Korean Tourism journal evaluated resident perceptions, visitor perceptions, and the magnitude of tourism to Korea. (Kang and Perdue 207)</td>
</tr>
<tr>
<td>15. Do you wish that your city would host the Olympics again?</td>
<td>“The 40th anniversary of the Grenoble Games, coinciding with the city’s campaign to represent France in the final selection of a host-town/region for the 2018 Winter Games elicited some popular revisionism about the ‘success’ of Grenoble ’68.” (Dauncey 99)</td>
</tr>
<tr>
<td>16. Do you believe that the city organized the Olympics well?</td>
<td>“Thus the Albertville Games became the most decentralized in Olympic history: ten venues were spread over 650 square miles.” (Renson 69)</td>
</tr>
<tr>
<td>17. Do you think that the Olympics improved the image of your city?</td>
<td>A Korean Tourism journal evaluated resident perceptions, visitor perceptions, and the magnitude of tourism to Korea. (Kang and Perdue 207)</td>
</tr>
</tbody>
</table>
18. Do you think that the Office du Tourisme should still market itself as an Olympic City?  

“The positive image and awareness of the host community, resulting from the mega-event promotion, publicity, and word of mouth communications, will decay over time. However the host country’s tourism industry… may counter this image decay by intensifying promotional activities.” (Kang and Perdue 210)

19. Has the city hosted any other major events similar in scale or type to the Olympics? Was this before or after the Olympics? Do you believe that they hosted this because of the Olympics?  

Albertville has the Tour de France pass through any year. Were they recently included or is it an old tradition?

20. When you heard that your city would be hosting the Olympics, did you have any environmental concerns? Did these come to pass?  

Environmental Issues in Albertville sparked the IOC to create an environmental policy. (Renson 69)

21. Have you ever been to any other Olympic games? How do you think your city compares to theirs?  

“Has chronicled and analyzed the impact of the Olympics on host region awareness and resident attitudes and reactions over a 5 year period.” (Kang and Perdue 207)

22. Did you move here after the Olympics? If so, then was the legacy of the Olympics part of your decision to settle here? If so, would you say it was a major or minor component?  

23. Were you aware of the government’s funding for your city’s Olympics? Does this change your view of the Olympics at all?  

“For the Grenoble Games in 1968, the French government treated these Games as an ‘affaire nationale’, giving 80% of basic sports installation costs and subsidizing operational expenses to the tune of 20 m francs.” The French government also subsidized Albertville (Essex and Chalkley 216-217)

### Economic Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Inspiration</th>
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<tbody>
<tr>
<td>1. What are the overall ADR, Occupancy, and number of rooms per year since the Olympics was awarded to your city?</td>
<td>“A useful and relatively easy measure of the incremental impact of an event is the difference between normal visitor numbers to the area, or occupancy rates, and numbers during the event.” (Getz 311)</td>
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<tr>
<td>2. What is the number of flights to</td>
<td>“Beyond the immediate participation”</td>
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<td>Question</td>
<td>Answer</td>
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<tr>
<td>the city per year since the Olympics was awarded to your city?</td>
<td>effects, does a mega-event affect long-term tourism to the host country? And if yes, how is that effect manifested?” (Kang and Perdue 206)</td>
</tr>
<tr>
<td>3. What is the total number of visitors per year since the Olympics were awarded to your city?</td>
<td>“A useful and relatively easy measure of the incremental impact of an event is the difference between normal visitor numbers to the area, or occupancy rates, and numbers during the event.” (Getz 311)</td>
</tr>
<tr>
<td>4. What percentage of the poster/pamphlet mentions the Olympics? (Measure the size of the text vs. the entire poster and frequency.)</td>
<td>A direct effect of the mega-event is “possible increase in tourism promotional activities by the host tourism industry to capitalize on a favorable marketing environment” (Kang and Perdue 208)</td>
</tr>
<tr>
<td>5. Where is the text located? Is there an accompanying photo/logo?</td>
<td>A direct effect of the mega-event is “possible increase in tourism promotional activities by the host tourism industry to capitalize on a favorable marketing environment” (Kang and Perdue 208)</td>
</tr>
<tr>
<td>6. How many posters per year mention the Olympics?</td>
<td>A direct effect of the mega-event is “possible increase in tourism promotional activities by the host tourism industry to capitalize on a favorable marketing environment” (Kang and Perdue 208)</td>
</tr>
<tr>
<td>7. When did the last poster mentioning the Olympics come out?</td>
<td>A direct effect of the mega-event is “possible increase in tourism promotional activities by the host tourism industry to capitalize on a favorable marketing environment” (Kang and Perdue 208)</td>
</tr>
<tr>
<td>8. Do you have any other forms of marketing in which the Olympics are or were featured?</td>
<td>A direct effect of the mega-event is “possible increase in tourism promotional activities by the host tourism industry to capitalize on a favorable marketing environment” (Kang and Perdue 208)</td>
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Addendum 2 - Counting Results

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