



SPORT LEGACY IN NIAGARA

BEFORE AND AFTER 2015

MAY 2014

POLICY BRIEF #19

Martha Barnes, PhD and Carol Phillips, PhD



NIAGARA COMMUNITY OBSERVATORY

SPORT LEGACY IN NIAGARA

The 2015 Pan American Games are coming to Niagara. The Henley site in St. Catharines will host rowing and the Welland International Flatwater Centre will host canoe and kayak races. Given Niagara is hosting such events, there is the potential to benefit community members through the creation of legacy initiatives. However, in order to realize these benefits, Niagara policy makers and other stakeholders must make decisions now to ensure residents remain the focus of any legacy planning.



SPORT LEGACY

Legacy has become a central component of hosting any large international sporting event. We define the term “legacy” as the impacts, both positive and negative, left on the community once a large event has been hosted. It can be tangible, such as a new sports facility for residents to use, or intangible such as a boost in civic pride.

Canada’s federal policy for hosting international sport events specifically mentions the need for a legacy in the communities that host these events in order to gain federal financial support.

Academic research is just beginning to understand the concept of legacy and its relevance to hosting large sporting competitions. Cashman (2005) has proposed that legacy can encompass the six following areas: sport (elite, mass, financial, built infrastructure); economics (direct and indirect), non-sport infrastructure, information and education such as volunteerism; public life, politics and culture such as international diplomacy; and symbols, memory and history such as civic pride.

Since 2000, the International Olympic Committee has been interested in legacy and developed the Olympic Games Impact (OGI) Study, a legacy analysis using specific indicators now required of all host cities.

In the 2010 Vancouver Olympic Games¹, \$110 million was set aside as a legacy fund to aid in the operational costs both before and after the Games for three facilities: the Whistler Sliding Centre, Whistler Olympic Park and the Richmond Oval. The money was also earmarked to fund amateur sport and coaching development both at these facilities and elsewhere in Canada. Other notable legacies left after the Vancouver Games that were not sport related included the convention centre, transportation improvements such as the Sea-to-Sky highway out to Whistler and the Canada Line that was built to speed travelers from the downtown to Vancouver airport. These were funded primarily by the higher levels of government.

It is also important to recognize that legacy from hosting an event can be negative. In Vancouver’s case, a tangible example includes the \$690 million construction loan the city had to unexpectedly assume in 2009 and pay off by selling the converted condos over the following few years.

¹ | The OGI report for Vancouver 2010 concluded hosting the Games cost \$4 billion, plus another \$3 billion in non-venue infrastructure. Taxpayers funded 62 per cent (\$4.8 billion) of the total cost (OGI-UBC Post-Games report 2013, p. 10).

WHAT ARE THE PAN AMERICAN GAMES?

JULY 10-26, 2015

An estimated 7,000 athletes, officials and coaches will arrive in the Greater Toronto Area for the 2015 Pan American Games, scheduled to take place from July 10-26, 2015. The Pan American Games is an international multi-sport event held every four years, in the year preceding the Summer Olympics. It is a competition between athletes from 41 countries in the Americas – North America, South America, Central America and the Caribbean.

There are 36 sports planned for the 17-day event plus separate Parapan sports that will take place August 7-15, 2015. The venues will spread from Oshawa to the Niagara Region. Specific to this brief, St. Catharines will host rowing at the Martindale Pond and Welland will host canoe and flatwater kayak events at its newly constructed Flatwater Centre. Approximately 400 athletes are expected locally.

An approximate budget has been set for the Games of \$1.4 billion in 2014 dollars and is to be shared by five partners: the federal and provincial governments, the City of Toronto, the Canadian Olympic Committee and the Canadian Pan-American Committee.²

For the 2015 Pan Am Games, the federal government is contributing up to \$65 million to the Toronto 2015 Legacy Fund as part of its overall funding contribution. The Province of Ontario will contribute up to \$5 million to this fund. This fund, managed by the Toronto Community Foundation, will contribute for at least the next 20 years to the operating costs and capital maintenance of three facilities: the Aquatics Centre & Field House (University of Toronto, Scarborough), the Athletics Stadium at York University, and the Velodrome in Milton (Toronto 2015 website). None of these ongoing funds are allocated to the Niagara facilities.

The Games are governed by the Pan American Sports Organization, comprised of the members from the 41 participating National Olympic Committees. It is, thus, affiliated with the International Olympic Committee.

² | According to the Multi-Party Agreement, the contributions are broken down as such: Federal Government \$386.1 million for capital costs, \$65 million for the legacy fund and \$48.9 million in services; Ontario Government \$495 million for operating costs, \$5 million legacy funding, all services under provincial jurisdiction and will cover any deficit; Participating Municipalities 44 per cent of venue capital costs plus staffing resources and services.

BY THE NUMBERS

17

DAYS

36

SPORTS

41

COUNTRIES

7000

ATHLETES, OFFICIALS, & COACHES

HOSTING SPORT EVENTS AS A PUBLIC POLICY STRATEGY

Hosting world class sporting events are attractive to countries and to municipalities because of the international attention they attract during the event, and are generally regarded as a "short-cut" to world recognition. This can be especially important if a city is trying to change its image and attract new investment, rejuvenate neighbourhoods or grow its tourism industry. But it comes at great expense, and financial support from the national government is usually required. In Canada, the Federal Policy for Hosting International Sport Events (Canada 2008) states policy objectives that include the requirement that such events contribute:

- Sport programming and infrastructure legacies targeting the development of elite athletes
- Economic benefits for the community, province/territory and country
- Social, cultural and community benefits such as voluntarism, "active citizenship and civic participation" and cultural programs promoting diversity, physical activity and healthy communities (Canada 2008)

For policy makers in a municipality who choose this strategic route, an international multi-sport event's primary function is to provide the host city with positive international media attention. This, theoretically, gives the host city a world-class image in its efforts to attract future tourism and economic development. It provides an opportunity to rejuvenate certain neighbourhoods, using funds from higher levels of government, and to provide its citizens with jobs, volunteer experiences and recreational opportunities. Much of the academic literature over the past 20 years has examined this type of event (referred to in academic literature as a "mega-event") in the context of being an economic development strategy.

Local government policy makers should be aware that academics seem to be in agreement that peer-reviewed studies on large sporting events, to date, have found economic benefits to be lacking, especially when compared to the investment. Positive public health legacies also lack supportive evidence.³

However, that does not necessarily mean that hosting these large sporting events comes with little value. It does mean that communities must be proactive and develop an implementation plan.

Increasingly, literature examining sports legacy calls for an implementation plan to be developed long before the events begin, for an implementation team to be in place long after the events have finished, and to be adequately funded over time (Sivaev 2012, Mitchell et al 2012).

There are also intangible benefits to hosting these types of events, such as civic pride and quality of life. But these are hard to measure and policy makers must decide whether or not the benefits that do occur are worth the costs.



³ | These economic literature reviews include Zimbalist 2010, Crompton 1995 and 2004, Coates and Humphreys 2008, Matheson 2006. Mitchell et al 2012 discusses health legacies as they pertain to the upcoming Toronto 2015 Pan Ams. See also Vancouver's OGI report that concluded tourism and long-term economic benefits were muted.



CASE STUDIES

To illustrate these issues, this policy brief offers three examples of communities that have hosted international sporting events or built sport facilities and their subsequent legacies. The Town of Minnedosa, a two-hour drive from Winnipeg, hosted the rowing and canoe/kayak events for the 1999 Pan Am Games. The City of Hamilton, located in the Golden Horseshoe area of Lake Ontario, hosted the 2003 World Cycling Championships. South Bend, Indiana, home to famed Notre Dame University, built the first North American artificial whitewater river as a downtown development project for both recreational and competitive uses in 1984. These examples provide notes for our community to use as guidance when planning for and implementing a legacy plan before, during and after the Niagara Region hosts rowing and flatwater events for the 2015 Pan Am Games.

CASE STUDY: MINNEDOSA LAKE 1999

Minnedosa Lake was the site of the rowing and flatwater events for the 1999 Pan Am Games that were hosted by Winnipeg, some 200 kilometres to the east. It is a lake constructed between 1910 and 1912 as a reservoir for a hydro-electric dam, but is currently a popular recreation site for the residents of the Town of Minnedosa (pop. 2,500) and its tourists, including cottagers and campers. The lake is approximately three kilometres long and 450m wide at its maximum and is fed by the Little Saskatchewan River. The town is a regional service centre for the area and primarily an agricultural community, though its population doubles during the summer with the arrival of cottagers (Minnedosa website).

Due to Minnedosa's proximity to Brandon (about a 30-minute drive), the town and its lake hosted the rowing and flatwater events for the 1997 Canada Games, which paved the way for it to host the 1999 Pan Am events. Its calm and sheltered waters made an ideal site for rowing and flatwater activities, and the valley sides provided good spectator viewing. However, it had and continues to have a silt problem. The lake was dredged in 1998, between the Canada Games and the Pan Am Games, at a cost of \$1.25 million which was paid for by a Canada-Manitoba Infrastructure Works Agreement (Canada/Manitoba 1998). The project was funded equally by the federal, provincial and local government. While the goal was to prepare the lake for the Pan Ams, this money did not come from the Pan Am budget. Additionally, facilities were built to stage the racing events such as a finish tower, a course (lanes), docks and storage shed. In all, a rough estimate of \$300,000 was invested in the event, including about \$40,000 by the town for general services and maintenance. All that remains now are the docks and the storage shed (personal interviews 2013).

In terms of direct economic spending, athletes were housed in Brandon and bused in for their events as the town did not have the hotel infrastructure to support the influx. During the Games, the town was filled with tourists that frequented the local businesses. However, since then, the town has returned to normal although some people do return regularly since first visiting the area during the event. No new businesses developed or relocated due to the Games.



The few facilities that were left behind and the volunteer base (now experienced in running water events of that magnitude) are the only legacies left in Minnedosa. A rowing club did not exist prior to the town hosting the event and one did not develop afterwards as competitive rowers were based in Winnipeg. The lake, which is in cottage country, was and continues to be used more by powerboats. A recreational canoe and kayak club has existed on and off throughout the years since the event. The town did bid to host the world canoe/kayak championships a couple times in the years following the Pan Ams, but lost those bids as it did not have enough hotel rooms to support athletes and visitors. It is currently building a regional events centre in the hopes of attracting the interest of hotel developers. The addition of hotel rooms may lead to another bid.

Meanwhile, the 1999 Winnipeg Pan Am Games had a total expenditure of \$140.6 million. There was a surplus of \$8.85 million, of which \$4 million went to an endowment fund with the Winnipeg Foundation. The Canadian Sports Centre (Manitoba), a national training centre, was a prime benefactor, receiving interest payments from the endowment fund used for programming, as was the refurbished Pan Am Pool, a renovated Winnipeg Stadium and several facilities at the University of Manitoba (McCloy 2002, Cyrenne 2000). Ultimately, Winnipeg seems to have reaped any tangible legacy benefits while it appears none filtered down to the satellite event location of Minnedosa.

CASE STUDY: HAMILTON 2003

Hamilton is a historically industrial town based primarily on the steel industry that began to look for ways to diversify its economy as its manufacturing base began its decline.

One of its strategies over the past 30-plus years has been to bid for large sporting events in order to grow its hospitality industry and change the city's image. It bid three times, unsuccessfully, to host the Commonwealth Games. However, a private effort (with government blessing) to bring the World Road Cycling Championships to Hamilton during this period was successful.

The World Road Cycling Championships, held in Hamilton in 2003, brought 950 athletes with more than 500 support staff to the area. The races attracted 230,000 spectators (104,000 on its final day) and an estimated 300 million television viewers worldwide. It made a 'profit' of approximately \$1.1 million to be used as legacy money. From that, \$630,000 was dedicated to set up a National Cycling Centre in Hamilton and the remaining funds were given to the Canadian Cycling Association to promote the sport and its Canadian racers.

Some 16 months after the event, a national centre was set up at McMaster University's athletic centre operating on the interest from this legacy grant. Its mandate was to develop the centre, encourage grassroots cycling in Ontario, provide athlete support services, and encourage more major cycling events for the region (Kernaghan 2005). In April 2010, it moved to the Ancaster Community Centre, located in the hills of the Niagara Escarpment, where it has developed a schools-based program and now has a mandate to identify, recruit and train high performance and development athletes. The centre states that since its creation in 2005, it has "assisted over 22 athletes win medals at National Championships and or become members of the Canadian National Cycling Team" (NCCH website 2014).



The City of Hamilton invested \$425,000 up front in the week-long event to become a partner (as opposed to having to underwrite the races), it also spent approximately \$174,221 on city services: \$724,221, of which \$550,000 was repaid by race organizers (The Spectator 2004). However, a post-game economic impact assessment estimated the city likely spent closer to \$4.5 million in capital expenditures, mainly on road work for the races of which approximately \$1.5 million would not have been spent otherwise (Van Harten 2004, Canadian Sport Tourism Alliance). The federal government contributed \$10 million in funds and services and the Trillium Fund and Ontario government contributed another \$3.5 million.

Aside from the international and national exposure, the assessment estimated economic impact to be \$48.3 million – a \$31.1 million impact for Hamilton and \$17.2 million for Ontario. Specifically, the assessment estimated the event created 410 jobs in Hamilton and \$ 9.4 million in wages and salaries. While the event instilled great civic pride, developed volunteer and human resource skill sets, and provided an immediate economic impact, there appears to have been no lasting economic development (legacy) that came out of the event in terms of business development or rejuvenation. There was no infrastructure legacy. Ten years later, the cycling centre appears to be the only tangible benefit remaining from the event.

CASE STUDY: SOUTH BEND, INDIANA 1980s

A somewhat different case example where insights can be gained is South Bend, Indiana. South Bend, a manufacturing city which thrived during the late 1800s until the 1960s decided to initiate a \$5 million capital project to build an artificial white water river through the downtown core re-inventing the use of an existing river in 1982, after years of political debate.

The primary motive for this project was urban revitalization followed by increased recreational opportunities. The two-year construction project (i.e. excavation and redevelopment) was financed through a General Obligation Bond (\$4 million) and other grants (\$1 million) which required a community referendum to pass. The ongoing financial responsibility of the river became a budget item with the Parks and Recreation Municipal Department. The first ever artificial whitewater river in North America opened in 1984. Through technology, the river (i.e. course) could be controlled and produce Class III Olympic-style white water.

In its original design, the hosting of mega sporting events wasn't paramount, however once the artificial whitewater river was in operation, the city began to focus on attracting events such as the United States Regional Olympic Team Trials for whitewater rafting, and the Mid-American slalom series (a world cup whitewater competition). However, this focus came to an end in the late 1990s for three reasons:

- Following the opening of the artificial river, other American cities began building artificial whitewater rivers with hosting in mind at the design stage. This design element coupled with technological advances made "newer" sites more attractive for hosting;
- A lack of volunteers and staff resources required to manage large scale events
- Necessary supporting infrastructure (i.e. washrooms, change rooms, etc.) were not part of the original design and created significant challenges for hosting.

To look at this case in terms of its sustained economic impact based on the hosting of sporting events, the picture would be bleak. However, given the original motivations for this development were to revitalize the urban core and create additional recreational opportunities, researchers looking at the impacts 25 years later paint a different picture (Barnes, Forrester & Leone, 2013). What is seen is a community with new private investment in the urban core. In 1991, the local newspaper reported that \$42.8 million in private business investments had been generated in the seven years since the opening of the artificial whitewater river (i.e. an \$11-million apartment complex, a \$9 million commerce centre, a \$4-million inn, and a \$4-million office building). This private investment was coupled with a city investment of \$8.8 million. These combined investments increased the property tax base in the area from \$200,000 to at times \$2 million.

Both anticipated and unanticipated recreational opportunities abound as community members can kayak on the river (only on weekends for a fee), use the developed 11 miles of trail adjacent to the river, attend free weekly summer concerts, or follow the historic interpretative self-guided tour along the river. Furthermore, quite unanticipated has been the renewed community pride and overall enhanced quality of life reported by those not directly interested in whitewater activities.

Many of these opportunities have resulted from an ongoing financial commitment from the city through the Parks and Recreation's Department annual operating budget. For example, in 2007, the artificial whitewater river received \$10,231 of an overall parks budget of \$1,508,495 not including staff wages. Given that continued finances have been available to support the artificial whitewater river, it may come as a surprise that user fees were introduced in 2007 to account for financial shortfalls associated with the ongoing operations of the artificial waterway (currently, community members must pay \$15 to kayak on the river daily).

This case is really about how a community built an artificial whitewater river with urban renewal and recreational opportunities in mind, yet for a brief period engaged in the hosting of sporting events to derive the projected benefits. Ultimately, it was decided that the hosting of mega-events was not a sustainable path to follow but rather by focusing on community members and their quality of life, legacies have been created.

Welland International Flatwater Centre



The Welland International Flatwater Centre (WIFC) will host the canoe and kayak events for the 2015 Pan Am Games. It is in a unique position to benefit from the experiences of others in both the development and sustainability of sports-related venues in communities. Given the current economic environment, being able to leverage the Pan Am Games for economic rejuvenation is at the forefront of decision makers involved with this project.

Work on the roughly \$10-million facility finished in the spring of 2013. Infrastructure includes a timing tower, an athletes' and officials' building, a multi-sport paddling/rowing training tank, an outdoor plaza area, permanent seating for 570, and temporary seating for 750. In terms of funding, it is reported that upper-tier government will provide \$4.1 million in support leaving the City of Welland with a price tag of \$5,063,700 (\$3.2 million in construction plus \$1,863,700 in ancillary costs = \$5,063,700). The city is currently deciding on a course of action to cover its share of the funding cost.

In terms of leveraging its involvement with the Pan Am Games, the WIFC has been strategic in diversifying its market and identifying eight sports that fall within its purview (i.e. canoeing, canoe polo, open water swimming, triathlon, rowing, kayaking, dragon boat racing, water polo). The WIFC has hosted the 2012 FINA Junior Open Water Swimming World Championships, the 2013 International Canoe Federation Junior and U23 Canoe Spring World Championships, the 2013 Canadian Masters Rowing Championships, and will host the International Dragon Boat Federation World Championships in 2015. In addition to the development of bids to attract high level performance sporting events, the WIFC has made a commitment to developing opportunities for local community members through clubs (i.e. rowing, swim, running), outreach programs, and other special events.

Royal Canadian Henley Rowing Course – St. Catharines

The City of St. Catharines will host the rowing at the current Royal Canadian Henley Rowing Course on Martindale Pond. Its capital legacy priorities include the replacement of the narrow Henley Island Bridge, a new Albano lane-marking system and modifications to the grandstand's concrete front pad. An estimated budget for these projects is \$820,000, of which the city will contribute approximately \$364,000 (Lafleche 2013). The infrastructure required at the St. Catharines site, which hosted the 1999 World Rowing Championships, is not as substantial as in Welland and therefore, the need to leverage its involvement does not seem as pressing. However, for both of these communities to gain from the substantial investments that will be necessary to host the Pan Am events, it will be useful to develop a coordinated approach to establishing both a sport and a non-sport legacy goal to ensure the needs of the community are met.

LEGACY ACTION

The Niagara Sport Commission is in the middle of a five-year contract (\$70,000 per year) with the Niagara Region for "marketing and acclimatization". In other words, the NSC is trying to attract warm-up events in various sports prior to the main competitions, and to market the region as a good place for participating countries to house their athletes in the weeks leading up to the Games. It foresees thousands of athletes needing accommodations and training opportunities up to six weeks before the official athletes' village opens in Toronto and it wants them to stay in Niagara and use its facilities. It is also the Region's lead in the "Games Designation Program" which works with municipalities in organizing the torch relay, using trademark properties and logos, and hosting various official community-based events. As part of its legacy the NSC hopes to develop a volunteer database of 1,500 to 2,000 people identifying specific skills and training. It is also building a Niagara sports facilities inventory for use in future attempts at marketing the region to sports groups. A bid for the 2025 Canada Games may be in Niagara's future.

LOOKING FORWARD

Legacy can be many things. It needs to be unique to individual communities. London 2012, as an example, was not as much interested in developing a tourism industry as it was in improving the physical activity of its citizens and rejuvenating certain neighbourhoods. Therefore:

- The focus of the legacy must relate to local citizens. There must be something in it for them.
- Stakeholders should use the upcoming mega-event as a stepping stone towards a broader vision for the community. For example, as is being done, building the Flatwater Centre should not be the end-goal, but rather another feature of the Welland Recreational Canal Corporation plans.
- While it is difficult to measure, some indicators of legacy impact should be determined prior to the event so that tangible and intangible legacy can be assessed at a later date.
- Success at leveraging the Pan Am Games will be based on the coordinated effort of a community to pre-plan for legacy. That is, what does the community want to get out of these events after they have left town? Planning must begin now.



WE SUGGEST STAKEHOLDERS ASK THE FOLLOWING QUESTIONS

1. WHAT DOES NIAGARA WANT?
2. HOW CAN WE MAKE THAT HAPPEN?
3. HOW CAN WE SUSTAIN IT?
4. WHAT IS THE VISION FOR NIAGARA, WHETHER OR NOT IT HOSTED THIS EVENT?
5. HOW DOES NIAGARA LEVERAGE THE PAN AMERICAN GAMES TO ACHIEVE THAT

REFERENCES

- Canada. 2008. Federal Policy for Hosting International Sport Events.
- Barnes, Martha, Scott Forrester and Michelle Leone. 2013. A city looks to its past to discover its future: A retrospective case study examining the evolution of an artificial white-water river development. *Managing Leisure* 18, no. 1 (January): 16-30.
- Bula, Frances. 2014. Vancouver sells Olympic Village Condos, recovers millions in debt. *The Globe & Mail*. April 28.
- Bula, Frances. 2013. Vancouver inches toward paying off Olympic Village debt. *The Globe & Mail*. April 22.
- Canada/Manitoba. 1998. Infrastructure Agreement Helps Improve Popular Minnedosa Lake. News Release. Jan. 23.
- Canadian Sport Tourism Alliance. 2004. UCI 2003 Road World Cycling Championships Hamilton, Ont. Economic Impact Assessment. February.
- Cashman, Richard. 2005. *The bitter-sweet awakening. The legacy of the Sydney 2000 Olympic Games*. Sydney: Walla Walla Press
- Coates, Dennis and Brad R. Humphreys. 2008. Do Economists Reach a Conclusion on Subsidies for Sports Franchises, Stadiums, and Mega-Events? Working Paper Series, Paper No. 08-18. North American Association of Sports Economists. August.
- Crompton, John. 2004. Beyond Economic Impact: An Alternative Rationale for the Public Subside of Major League Sports Facilities. *Journal of Sports Management* 18, no. 1 (January): 40-58.
- Crompton, John. 1995. Economic Impact Analysis of Sports Facilities and Events: Eleven Sources of Misapplication. *Journal of Sports Management* 9: 14-35.
- Cyrenne, P. 2000. 1999 Pan Am Games Legacy Study. University of Winnipeg. Winnipeg: Institute of Urban Studies. February 25.
- Kernaghan, John. 2005. National Cycling Centre opens at McMaster. *The Hamilton Spectator*. Feb. 2.
- Lafleche, Grant. 2013. St. Catharines to host Pan Am rowing. *The Standard*. Nov. 15.
- Matheson, Victor A. 2006. Mega-events: The effects of the world's biggest sporting events on local, regional, and national economies. College of the Holy Cross Dept. of Economics. Faculty Research Series Paper No. 06-10. October.
- McCloy, Cora. 2002. Hosting International sport Events in Canada: Planning for Facility Legacies. *The Global Nexus Engaged*. Sixth International Symposium for Olympic Research.
- Mitchell, Marc, Heather Manson, Ken Allison, Jennifer Robertson, Peter Donnelly, Jack Goodman. 2012. Leveraging Legacies: Will the Toronto 2015 Pan Am Games Really Benefit Public Health? *UTMJ* 90, no. 2 (December)
- Hamilton Spectator*. 2004. Organizers to outline cycling race spinoffs. Feb. 27.
- Preuss, H. 2007. The Conceptualisation and measurement of mega sport event legacies. *Journal of Sport & Tourism* 12, no. 3-4 (Aug.-Nov.): 207-27.
- Sivaev, Dmitry. 2012. A Marathon Not a Sprint? Legacy Lessons for London. Centre for Cities, London. (September)
- Toronto 2015. 2015 Pan Parapan American Games Multi Party Agreement.
- OGI-UBC Research Team. 2013. Olympic Games Impact Study for the 2010 Olympic and Paralympic Winter Games. Post-Games. Report. Oct. 23.
- Van Harten, Peter. 2004. Cycling race benefit pegged at \$48.3 million. *The Hamilton Spectator*. Feb. 28.
- Zimbalist, Andrew. 2010. Is It Worth It? *Finance & Development*. (March)

WEBSITES

centreforcities.org
 discoverminnedosa.com
 ncch.ca
 toronto2015.org

SPORT LEGACY IS ...

"... all planned and unplanned, positive and negative, tangible and intangible structures created for and by a sport event that remain longer than the event itself."

- Holger Preuss, 2007



Niagara Community Observatory
brocku.ca/NCO
@BrockNCO