

A Sustainable Olympic Games: Applying the NEPA Framework to Reevaluate Olympic Site Selection

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INTRODUCTION

In the late nineteenth century, Pierre de Coubertin proposed the revival of the Olympic Games, which came to life in 1896 as the modern Olympic Games in Athens, Greece.¹ The widely popular ancient Olympic Games ceased in 393 or 394 A.D., when Roman Emperor Theodosius I rejected them as a celebration of Zeus and obstructive to the growing Christian empire.² When de Coubertin proposed the modern Olympic Games (the “Games”), he suggested that the heart of the Games shift from Zeus and religion, to “peace among nations.”³ Today, the Olympic Charter retains de Coubertin’s philosophy that the Games “interweave sports, education, and the idea of world-wide peace.”⁴

The current Olympic Charter adds depth to de Coubertin’s philosophy.⁵ The Olympic Charter requires that the International Olympic Committee (“IOC”), the committee tasked with organizing the Games, “encourage and support a reasonable concern for environmental issues, to

¹ Norbert Muller, *The Idea of Peace as Coubertin’s Vision for the Modern Olympic Movement: Development and Pedagogic Consequence*, 21 THE SPORT JOURNAL, <https://thesportjournal.org/article/the-idea-of-peace-as-coubertins-vision-for-the-modern-olympic-movement-development-and-pedagogic-consequences> (last visited Nov. 17, 2019); Pierre de Coubertin, Olympic.org, <https://www.olympic.org/pierre-de-coubertin>. (last visited Nov. 17, 2019).

² *Frequently Asked Questions about the Ancient Olympic Games*, THE PERSEUS DIG. Library Project, Tufts Univ. (last modified Aug. 13, 2004) <http://www.perseus.tufts.edu/Olympics/faq11.html>.

³ Muller, *supra* note 1.

⁴ *Id.*; see OLYMPIC CHARTER, INT’L OLYMPIC COMMITTEE 11 (2019), https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/General/EN-Olympic-Charter.pdf#_ga=2.61652076.171427588.1551631017-933637543.1546955458. [hereinafter OLYMPIC CHARTER].

⁵ OLYMPIC CHARTER, *supra* note 4, at 11.

promote sustainable development in sport and to require that the Olympic Games are held accordingly.”⁶

In fulfilling its duty, the IOC articulates admirable commitments to the environment, illustrated in the IOC’s recent promulgations of the IOC Sustainable Strategy and Olympic Agenda 2020 (“OA 2020”).⁷ However, the IOC’s system for Olympic site selection seemingly fails to foster “reasonable concern for environmental issues” and “sustainable development in sport.”⁸ The IOC prescribes an “ambulatory” system, meaning the Games change location for each summer and winter event.⁹ The IOC relies on cities to voluntarily bid to host the Games, and trusts that cities will abide by unenforceable promises to mitigate environmental impacts.¹⁰ Many host cities have fallen outstandingly short of their environmental targets, leaving behind a massive environmental footprint and tarnished legacy.¹¹

⁶ *Id.* at 16–17.

⁷ IOC SUSTAINABLE STRATEGY, EXECUTIVE SUMMARY, INT’L OLYMPIC COMMITTEE (Oct. 2017), [https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Fact sheets-Reference-Documents/Sustainability/2017-03-21-IOC-Sustainability-Strategy-English-01.pdf](https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Fact%20sheets-Reference-Documents/Sustainability/2017-03-21-IOC-Sustainability-Strategy-English-01.pdf); OLYMPIC AGENDA 2020, 20+20 RECOMMENDATIONS, INT’L OLYMPIC COMMITTEE at 1, 3 (Dec. 2014), https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Documents/Olympic-Agenda-2020/Olympic-Agenda-2020-20-20-Recommendations.pdf#_ga=2.217973328.736290369.1547818635-93363754.3.1546955458; *see also* OLYMPIC GAMES TO BECOME “CLIMATE POSITIVE” FROM 2030 (Mar. 2020), <https://www.olympic.org/news/olympic-games-to-become-climate-positive-from-2030> (describing a new “Climate Positive” initiative that will include an “Olympic Forest”); OLYMPIC SUSTAINABILITY, <https://www.olympic.org/sustainability> (last visited Apr. 29, 2020) (describing ongoing efforts by the IOC to address climate change and be sustainable).

⁸ OLYMPIC CHARTER, *supra* note 4, at 17.

⁹ *See* JoAnne D. Spotts, *Global Politics and the Olympic Games: Separating the Two Oldest Games in History*, 13 PENN ST. INT’L L. REV., 103, 119 (1994); *see also* *Olympic Games Candidature Process*, INT’L OLYMPIC COMMITTEE, <https://www.olympic.org/all-about-the-candidature-process> (last visited Mar. 2, 2019) (describing the candidature process for host cities).

¹⁰ Matteo Fermaglia, *The Show Must Be Green: Hosting Mega-Sporting Events in the Climate Change Context*, 11 CARBON & CLIMATE L. REV. 100, 108 (2017); *see also* *Olympic Games Candidature Process*, *supra* note 9.

¹¹ Alexandra L. Sobol, *No Medals for Sochi: Why the Environment Earned Last Place at the 2014 Winter Olympic Games, and How Host Cities Can Score A “Green” Medal in the Future*, 26 VILL. ENVTL. L.J. 169, 185 (2015); *see also e.g.* Martin A. Lee, Opinion, *Greenest Games Ever? Not!*, L.A. TIMES (Feb. 3, 2002), <http://articles.latimes.com/2002/feb/03/opinion/op-lee> (discussing the Salt Lake City Olympic Committee’s failed attempts at environmental sustainability).

The Fundamental Principles of Olympism, codified by the Olympic Charter, do not require the Games to change location.¹² The method by which the IOC selects the location of the Games (generally termed “Olympic site selection”) is left to the IOC’s discretion.¹³ The IOC currently utilizes a bidding system—as mentioned above—wherein cities voluntarily bid to host the Games and the IOC chooses amongst those cities.¹⁴ The IOC approved OA 2020 in December 2014, which minimally changes the bidding system.¹⁵ OA 2020 simply reframes bidding as an “invitation process,” decreases the cost to bid, and describes a “holistic concept” for bid review that places heightened emphasis on environmental impacts.¹⁶ It is doubtful, though, that the minor changes in OA 2020 will better serve the environment by any measurable amount.

This Note explores the idea of systemic change to Olympic site selection. Divided into three sections, it argues that the IOC should apply the National Environmental Policy Act (“NEPA”) framework to evaluate alternatives to the traditional bidding system, such as permanent locations.

First, this Note presents background information about the Games, including history about environmental awareness within the Olympic movement, the current system of Olympic site selection, and the environmental legacies of recent Games. Second, this Note discusses why the IOC should consider systemic change to Olympic site selection. Finally, this Note recommends applying the NEPA framework to analyze alternative structures. It describes the purpose served by a NEPA-style analysis and begins to describe what the analysis might look like.

I. BACKGROUND

This section will first explore the history of environmental awareness within the Olympic movement. Then, it will examine the current framework for Olympic site selection. Finally, it will comment on the environmental legacies of recent Games.

¹² OLYMPIC CHARTER, *supra* note 4, at 11–12 (revealing no requirement for ambulatory Games).

¹³ *See id.* at 72.

¹⁴ *Olympic Games Candidature Process*, *supra* note 9.

¹⁵ Fermeiglia, *supra* note 10, at 103–04; OLYMPIC AGENDA 2020, *supra* note 7; *Olympic Games Candidature Process*, *supra* note 9.

¹⁶ OLYMPIC AGENDA 2020, *supra* note 7.

A. *The History of Environmental Awareness Within the Olympic Movement*

The first modern Summer Games were held in 1896 in Athens, Greece.¹⁷ Soon thereafter, the first modern Winter Games were held in Chamonix, France.¹⁸ In the early twentieth century, concern for the environment was not a priority for the international community.¹⁹ Accordingly, it was not a priority for the Games. For nearly a century, promoting sports, education, and world-wide peace did not encompass ideas of sustainability and environmental protection.²⁰

The international climate conversation took off in the second half of the twentieth century.²¹ Suddenly, protecting the environment was of international concern.²² In 1987, the United Nations (“UN”) World Commission on Environment and Development published *Our Common Future*, a report that articulated the concept of “sustainable development” and brought public attention to the need to protect the environment.²³ The notion of “sustainable development” meant “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”²⁴ Internationally, actions were evaluated under this new lens. In 1992, the UN Earth Summit in Rio de Janeiro was the largest gathering of world leaders in history, with over 100 heads of state and representatives of 178 nations.²⁵ The summit fashioned

¹⁷ Muller, *supra* note 1, at 21.

¹⁸ *Chamonix 1924 Olympic Winter Games*, ENCYCLOPEDIA BRITANNICA (last updated Jan 19, 2020), <https://www.britannica.com/event/Chamonix-1924-Olympic-Winter-Games>.

¹⁹ See LYNTON KEITH CALDWELL & PAUL STANLEY WEILAND, INTERNATIONAL ENVIRONMENTAL POLICY: FROM THE TWENTIETH TO THE TWENTY-FIRST CENTURY, *Third Edition* at 32 (Duke Univ. Press Books 3rd ed., 1996).

²⁰ See generally SUSTAINABILITY THROUGH SPORT: IMPLEMENTING THE OLYMPIC MOVEMENT’S AGENDA 21, INTERNATIONAL OLYMPIC COMMITTEE 5, 16 (2012), https://stillmed.olympic.org/Documents/Commissions_PDFfiles/SportAndEnvironment/Sustainability_Through_Sport.pdf (revealing the environmental issues first became a focus of the Olympic movement in the early 1990s).

²¹ CALDWELL & WEILAND, *supra* note 19, at 32.

²² *Id.*

²³ UN, World Comm’n on Env’t & Development, *Our Common Future*, at 41 (Mar. 20, 1987), <http://www.un-documents.net/our-common-future.pdf>; SUSTAINABILITY THROUGH SPORT, *supra* note 20, at 16.

²⁴ *Our Common Future*, *supra* note 23, at 41.

²⁵ *United Nations Conference on Economic Development*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/event/United-Nations-Conference-on-Environment-and-Development> (last updated Jan. 21, 2020); *Rio Earth Summit*, SUSTAINABLE

Agenda 21, a nonbinding action plan to protect the planet while sustaining economies and infrastructures.²⁶ Agenda 21 recognized that human actions are putting the long-term viability of Earth at risk, and that steps must be taken to minimize environmental consequences.²⁷

In the 1990s, the Olympic movement recognized international concern for the environment and responded. The Olympic Charter incorporated environmental awareness and sustainability into its mission.²⁸ In 1994, the Centennial Olympic Congress pronounced the IOC's duty to encourage and showcase environmental awareness and sustainability in sport.²⁹ In 1995, the Sport and Environmental Commission was founded with an intent to advise the IOC on progress related to environmental governance and sustainable development.³⁰ In 1996, "environment" became the third Pillar of Olympism along with "sport" and "culture."³¹ Finally, in 1999, the IOC published *Olympic Movement's Agenda 21: Sport for Sustainable Development*.³² The *Olympic Movement's Agenda 21* articulated recommendations to attain a sustainable Games and sustainability in sport broadly.³³ It gave recommendations to reduce the use of non-renewable resources, adopt energy-saving techniques, and decrease air, water, and soil pollution.³⁴ It also suggested that environmental impacts be assessed prior to and after the Games.³⁵ These are just some of the changes incorporated by the IOC in the 1990s.³⁶ The IOC seemingly understood the large environmental footprint of the Games and recognized that the Games were an international forum for sharing ideas and setting a good example.

Nearly twenty years later, the international community again recognizes unprecedented climate threats and people worldwide are

ENV'T (Sept. 19, 2018), http://www.sustainable-environment.org.uk/Action/Earth_Summit.php.

²⁶ *Rio Earth Summit*, *supra* note 25; *See generally* UN Conference on Environment and Development, *Agenda 21*, (June 1992), <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>.

²⁷ *Agenda 21*, *supra* note 26.

²⁸ SUSTAINABILITY THROUGH SPORT, *supra* note 20, at 5.

²⁹ *Id.*

³⁰ *Id.* at 16.

³¹ *Id.* at 17.

³² *Id.*

³³ Philippe Furrer, *Sustainable Olympic Games: A Dream or a Reality?*, 8 *BOLLETTINO DELLA SOCIETA GEOGRAFICA ITALIANA*, at 11–12 (2002) (It.), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.603.5959&rep=rep1&type=pdf> (draft copy).

³⁴ *Id.* at 12.

³⁵ *Id.*

³⁶ *See generally* SUSTAINABILITY THROUGH SPORT, *supra* note 20, at 5.

responding. The 2018 UN Intergovernmental Panel on Climate Change (“IPCC”) Report presented alarming predictions about global climate change.³⁷ The report cited 6,000 scientific references, and was written and edited by ninety-one scientists from forty countries.³⁸ The report found that if the world is successful in limiting global warming to 1.5°C above pre-industrial levels, a number below the widely accepted 2°C target, climate change will nonetheless cause “rapid, far-reaching and unprecedented changes” in all aspects of society.³⁹ Climate change will compel immense adaptation in energy, industry, buildings, transport, and cities.⁴⁰ Debra Roberts, co-chair of an IPCC Working Group, went as far as saying “[t]he next few years are probably the most important in our history” because choices made today dictate the future climate threats to the world.⁴¹

The Olympic movement has not yet responded proportionally to this new international call for action. In the 1990s, new concerns led the IOC to make unprecedented changes to its system.⁴² Today, it has not yet done so. Indeed, the IOC should shiver at recent studies predicting that only six of the past nineteen Winter Games host cities will be “climatologically reliable” to host the Winter Games by 2100 in a business-as-usual scenario.⁴³ But, the IOC has made only marginal changes to its framework and goals, implementing, for example, OA 2020. These items are a nod to heightened environmental concerns, but do not match the response demanded by the international community.⁴⁴ Today, the IOC should consider unprecedented framework changes as it did in the 1990s.

³⁷ See Intergovernmental Panel on Climate Change [IPCC], *Special Report: Global Warming of 1.5°C: Summary for Policymakers* (Oct. 8, 2018) https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf [hereinafter IPCC]; see also Coral Davenport & Kendra Pierre-Louis, *U.S. Climate Report Warns of Damaged Environment and Shrinking Economy*, N.Y. TIMES (Nov. 23, 2018), <https://www.nytimes.com/2018/11/23/climate/us-climate-report.html>.

³⁸ Coral Davenport, *Major Climate Report Describes a Strong Risk of Crisis as Early as 2040*, N.Y. TIMES (Oct. 7, 2018), <https://www.nytimes.com/2018/10/07/climate/ipcc-climate-report-2040.html>.

³⁹ IPCC, *supra* note 37.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² See *supra* notes 28–36 and accompanying text.

⁴³ *Past & Future Winter Olympic Warming*, CLIMATE CENTRAL (Feb. 7, 2018), <https://www.climatecentral.org/gallery/maps/past-future-winter-olympic-warming>.

⁴⁴ See e.g. IPCC, *supra* note 37.

B. The Current Structure of Olympic Site Selection

Currently, Olympic site selection follows a bidding system.⁴⁵ For each Summer and Winter Games, the IOC selects a host city from those that voluntarily bid for the Games.⁴⁶ The Games are “ambulatory” in that they move from city to city each Olympic cycle, with no guarantee that they will ever occur at a location more than once.⁴⁷

The bidding process is complex and traditionally expensive.⁴⁸ Cities complete lengthy questionnaires designed by the IOC.⁴⁹ The questionnaires require cities to submit information and comprehensive plans addressing various issues.⁵⁰ Among these issues are security, staffing, transportation, infrastructure, waste, energy consumption, and air pollution.⁵¹

Although this process may appear reasonable, it presents several problems. First, cities’ written plans are rarely executed and are effectively unenforceable.⁵² Yet, the IOC continues to select the location of the Games based on such plans. New issues arise and host cities decide what to prioritize, often leaving environmental commitments behind.⁵³ Second, over the past two decades, the IOC observed a drastic decrease in bids.⁵⁴ Consequently, this results in fewer cities to choose from.⁵⁵ The decrease in bids was largely because the bidding process itself was so costly.⁵⁶ Other reasons included lack of post-Games prosperity, net monetary loss, security concerns, and citizen pressure.⁵⁷ For example, eleven bids were received for the 2004 Summer Games, seven for the 2016 Games, five for

⁴⁵ See *Olympic Games Candidature Process*, *supra* note 9.

⁴⁶ *Id.*

⁴⁷ See *id.*; see also Fermeglia, *supra* note 10, at 11.

⁴⁸ See EXEC. STEERING COMM. FOR OLYMPIC GAMES DELIVERY, INT’L OLYMPIC COMM., OLYMPIC AGENDA 2020 OLYMPIC GAMES: THE NEW NORM 3 (2018), <https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/News/2018/02/2018-02-06-Olympic-Games-the-New-Norm-Report.pdf>.

[hereinafter OLYMPIC GAMES: THE NEW NORM].

⁴⁹ See *id.*; *Olympic Games Candidature Process*, *supra* note 9.

⁵⁰ See generally OLYMPIC GAMES: THE NEW NORM, *supra* note 48, at 3.

⁵¹ *Id.* at 8.

⁵² Fermeglia, *supra* note 10, at 106.

⁵³ See e.g. Cat Lazaroff, *Winter Olympics Not a Green Triumph*, ENV’T NEWS SERV. (Feb. 11, 2002), <http://www.ens-newswire.com/ens/feb2002/2002-02-11-06.html>.

⁵⁴ Rod Ludacer, *No One Wants to Host the Olympics Anymore – Will They go Away?*, BUS. INSIDER (Feb. 6, 2018), <https://www.businessinsider.com/future-olympics-no-count-ry-wants-to-host-games-2018-2>.

⁵⁵ *Id.*

⁵⁶ OLYMPIC GAMES: THE NEW NORM, *supra* note 48, at 3.

⁵⁷ Ludacer, *supra* note 54.

the 2020 Games, and only two for the upcoming and 2024 Games.⁵⁸ The IOC is no longer privileged with the opportunity to pick amongst many qualified cities. The IOC must choose from the few cities that voluntarily bid, even though those cities may not be fit to host the Games.

To incentivize more bids, the IOC implemented OA 2020, which streamlines the bidding process.⁵⁹ OA 2020 procedures are operative for the selection of the 2026 Winter Games.⁶⁰ OA 2020 prescribes a bidding process that includes an “invitation phase” and a three-part “candidature process.”⁶¹ In the “invitation phase,” cities engage with the IOC to consider costs and benefits of hosting the Games.⁶² This phase is exploratory and not a formal commitment to bid.⁶³ The IOC then invites cities to embark upon the three-part “candidature process,” wherein cities develop their formal bid.⁶⁴ The “candidature process” is “streamlined” under OA 2020, compared to prior bidding systems, with the IOC providing more assistance to cities as they develop their bid portfolio.⁶⁵ The “candidature process” now encompasses three distinct stages: (1) Vision, Games Concept, and Strategy; (2) Governance, Legal, and Venue Funding; and (3) Games Delivery, Experience, and Venue Legacy.⁶⁶ These stages tease apart the planning process and provide for ongoing feedback from the IOC as cities develop plans.⁶⁷ After the invitation phase and the three-part candidature process, the IOC Evaluation Commission publishes a report explaining the feasibility of proposed plans by each candidate city, the ability of each city to deliver a successful Games, and the prospects for a positive legacy to be left by the Games.⁶⁸ Eligible IOC members then cast votes to select the host city.⁶⁹ The winning city must

⁵⁸ Gareth Evans, *Olympic Games: Why cities are snubbing the 'greatest show on Earth'*, BBC NEWS (Nov. 18, 2018), <https://www.bbc.com/news/world-46236682>.

⁵⁹ OLYMPIC GAMES: THE NEW NORM, *supra* note 48, at 3.

⁶⁰ *Id.*; Despite the new OA 2020 process, there were only two candidate cities for the 2026 Winter Games—Milan-Cortina d’Ampezzo, Italy and Stockholm-Are, Sweden. The Games were awarded to Italy. Jeré Longman, *Italy is Chosen to Host the 2026 Winter Olympics*, THE N.Y. TIMES (June 24, 2019), <https://www.nytimes.com/2019/06/24/sports/olympics/italy-2026-winter-olympics.html?auth=login-email&login=email>.

⁶¹ *Olympic Games Candidature Process*, *supra* note 9.

⁶² OLYMPIC GAMES: THE NEW NORM, *supra* note 48, at 3.

⁶³ *Olympic Games Candidature Process*, *supra* note 9.

⁶⁴ *Id.*

⁶⁵ OLYMPIC GAMES: THE NEW NORM, *supra* note 48, at 3.

⁶⁶ *Olympic Games Candidature Process*, *supra* note 9.

⁶⁷ *See generally id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

receive an absolute majority of the votes cast.⁷⁰ If no city receives the requisite majority after the first round, the city with the least votes gets eliminated.⁷¹ This process continues until one city receives an absolute majority, winning the Olympic bid.⁷²

The IOC recognizes three primary benefits of OA 2020.⁷³ First, cities receive more support from the IOC.⁷⁴ Second, candidature deliverables and costs are decreased.⁷⁵ Third, a “partnership approach” between the IOC and the city will encourage greater efficiency and sustainability of the Games.⁷⁶ However, OA 2020 does little to remedy the compliance problem. OA 2020 does not create a system to hold cities accountable for executing plans as written.⁷⁷

C. Environmental Legacies of Recent Olympic Games

Each Games seeks to leave a positive “legacy,” and the Olympic Charter places a duty on the IOC to assist in the achievement of such legacy.⁷⁸ Part of that legacy is inevitably the environmental impact of the Games. The following is a brief synopsis of the environmental legacies of several recent Games. In summation, host cities unanimously presented lofty goals but failed to execute them, tainting their environmental legacies, and demonstrating the need for systemic change.

1. Salt Lake City, Utah 2002

The 2002 Winter Games in Salt Lake City, Utah achieved many environmental triumphs; yet it left a disturbingly large footprint for a one-time event. The Olympic Organizing Committee for the Salt Lake City Games drafted, and largely executed, a plan for the Games to demonstrate

⁷⁰ *Host City Election for The Olympic Summer Games 2020*, OLYMPIC.ORG (last updated 2019), <https://www.olympic.org/2020-host-city-election> (reflecting the host city selection process under OA 2020 because the voting procedure remained unchanged); *see generally* OLYMPIC AGENDA 2020, *supra* note 7 (indicating that voting procedures did not change because it does not recommend a change).

⁷¹ *Host City Election for The Olympic Summer Games 2020*, *supra* note 70 (reflecting the host city selection process under OA 2020 because the voting procedure remained unchanged).

⁷² *Id.*

⁷³ OLYMPIC GAMES: THE NEW NORM, *supra* note 48, at 3.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *See generally id.*

⁷⁸ *Id.* at 5; OLYMPIC CHARTER, *supra* note 4, at 17.

environmental protection, new technologies, and sustainability.⁷⁹ As part of its plan, the Salt Lake City Games created a program that planted over 2 million trees worldwide.⁸⁰ It located new buildings so as to maximize sun exposure and reduce heat costs.⁸¹ It designed venues for future use by the University of Utah and Olympic training programs—use which indeed has come to fruition.⁸² However, the Salt Lake City Games' legacy remains perturbing. The Olympic Organizing Committee originally budgeted \$6 million out of a \$1.5 billion budget to address environmental concerns.⁸³ But, as other issues arose, environmental concerns became disposable, and funding decreased to \$1.5 million.⁸⁴ This was one-tenth of one percent of the total Olympic budget.⁸⁵ The U.S. Department of Energy offered to provide solar panels as an energy source for the Games, but the offer was turned down for unclear reasons.⁸⁶ Original plans included immense public transportation to reduce vehicle impacts, but instead \$35 million was spent on new parking lots to accommodate single family vehicles.⁸⁷ One thousand three hundred seventy-eight acres of environmentally sensitive federal public land were traded to Olympic organizers to build a ski resort, host condominiums, vacation homes, a golf course, and other facilities.⁸⁸ A new highway was built to access that resort.⁸⁹ The Endangered Species Act was waived to enable these feats, putting at least one endangered plant species at risk.⁹⁰ In sum, the Salt Lake City Games are considered one of the most “environmentally friendly” Games, but they still left a permanent footprint on the environment. This footprint might be more palatable if the Games were surely going to return to Salt Lake City in the near future.

2. *Beijing, China 2008*

The 2008 Summer Games in Beijing, China illustrated environmental efforts in the lead up and during the Games, but its legacy was tarnished

⁷⁹ Lazaroff, *supra* note 53.

⁸⁰ Sobol, *supra* note 11, at 176–81.

⁸¹ *Id.* at 177–81.

⁸² *Id.* at 177.

⁸³ *Id.* at 181; Lee, *supra* note 11.

⁸⁴ Sobol, *supra* note 11, at 181.

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ Lazaroff, *supra* note 53.

⁸⁸ *Id.*

⁸⁹ Lee, *supra* note 11.

⁹⁰ Lazaroff, *supra* note 53.

in the aftermath.⁹¹ Beijing spent about \$40 billion on infrastructure alone in preparation for the Games.⁹² This spending helped develop new wastewater treatment plants, solid waste processing facilities, green belts, and “clean” buses for transportation during the Games.⁹³ Beijing drastically improved its air pollution levels for the Games and started using natural gas, geothermal, and wind power to replace coal.⁹⁴ However, once the Games ended, the city pollution returned to harmful levels, as cars returned to the roads and other environmental initiatives were pushed aside.⁹⁵ Although the Games were memorable for their steps forward in environmental protection, a lot of money was spent for a coveted “legacy” that was short lived.

3. Sochi, Russia 2014

The 2014 Winter Games in Sochi, Russia set forth arguably the most impressive environmental plan, but ended up having the worst environmental record in history.⁹⁶ Lack of transparency and enforcement led to outcomes that significantly differed from articulated plans.⁹⁷ Sochi failed to meet its clean water, carbon neutral, and “zero waste” promises.⁹⁸ New infrastructure was built in a way that caused major damage to the home foundations of local residents.⁹⁹ Plant and animal species were destroyed, and toxic waste flooded the Myzmta River.¹⁰⁰ The Sochi Games left a lasting legacy of corruption and environmental destruction.

4. Rio de Janeiro, Brazil 2016

For the 2016 Summer Games in Rio de Janeiro, Brazil promised to utilize the Games to clean up Rio de Janeiro’s water quality, implement renewable energy systems, use sustainable designs and construction techniques, and showcase efficient transportation systems.¹⁰¹ However,

⁹¹ See generally UNITED NATIONS ENVIRONMENT PROGRAMME, INDEPENDENT ENVIRONMENTAL ASSESSMENT: BEIJING 2008 Olympics (2009).

⁹² Lee M. Sands, *The 2008 Olympics’ Impact on China*, CHINA BUS. REV. (July 1, 2008), <http://www.chinabusinessreview.com/the-2008-olympics-impact-on-china>.

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ Sobol, *supra* note 11, at 185.

⁹⁶ *Id.* at 185–86.

⁹⁷ See *id.* at 188.

⁹⁸ See *id.* at 185–89.

⁹⁹ *Id.* at 188.

¹⁰⁰ *Id.* at 189.

¹⁰¹ Sylvia Trendafilova et al., *Sustainability and the Olympics: The case of the 2016 Rio Summer Games*, THE J. OF SUSTAINABILITY EDUCATION, Dec. 2017, available at

these promises were set aside as cost, political forces, cultural expectations, and the reality of the event's magnitude set in.¹⁰² Instead of building wastewater treatment plants and recuperating damaged wildlife habitats, money was spent on extravagant new stadiums and sports venues.¹⁰³ A new golf course was built, although sufficient golf courses already existed, invading a reserve home to rare plant and animal species.¹⁰⁴ Additionally, transportation "improvements" became liabilities as a bike lane collapsed and a light rail system suffered power problems.¹⁰⁵ These are just some calamities that taint the environmental legacy of the Rio de Janeiro Games.

II. CHANGING THE STRUCTURE OF OLYMPIC GAMES SITE SELECTION

This section first discusses why the current structure of Olympic site selection may not be sustainable. Second, this section shows that the Fundamental Principles of Olympism permit change and that perhaps the IOC has a duty, at the very least, to consider change.

A. The Current Site Selection Process is Not Sustainable.

As described above, the past two decades of Games described admirable plans for environmental protection and sustainability. However, these Games unanimously failed to execute their plans. Most of the Games produced enormous amounts of waste, carbon emissions, and other environmental hazards that exactly contradicted their articulated objectives.¹⁰⁶ The Games left huge environmental footprints—footprints that continue to grow in some instances—in cities even after the Games end.¹⁰⁷ Under the current bidding system and the "ambulatory" nature of Olympic site selection, each of these cities is unlikely to host another

http://www.susted.com/wordpress/content/sustainability-and-the-olympics-the-case-of-the-2016-rio-summer-games_2018_01; Lorraine Chow, *7 Major Environmental Issues Already Spoiling the Rio Olympics*, ECOWATCH (Jul. 26, 2016, 8:13 AM), <https://www.ecowatch.com/environmental-issues-already-spoiling-the-rio-olympics-1944588645.html>.

¹⁰² Trendafilova et al., *supra* note 101.

¹⁰³ Jonathan Watts, *Have the Olympics Been Worth It For Rio?*, THE OBSERVER (Aug. 21, 2016, 2:00 AM), <https://www.theguardian.com/sport/2016/aug/21/rio-olympics-residents-impact-future-legacy>.

¹⁰⁴ Chow, *supra* note 101.

¹⁰⁵ *Id.*

¹⁰⁶ *See supra* notes 74-99 and accompanying text.

¹⁰⁷ *Id.*

Games in the near future. All of this environmental damage was for a four-week event that will likely never take place in that location again.¹⁰⁸ In the face of the 2018 UN Climate Report and other unprecedented international warnings about environmental impacts, lasting and largely non-recyclable environmental destruction for a four-week sporting event is unsustainable long-term.

B. The Fundamental Principles of Olympism Permit Change

The Fundamental Principles of Olympism are silent with respect to the location of the Games and how such location is chosen.¹⁰⁹ The Principles demand no variation in location, nor do they demand a voluntary bidding process.¹¹⁰ In fact, the ancient Games were almost always held at the same location in Greece.¹¹¹ It was only when the modern Games began that de Courbetin decided to make them “ambulatory.”¹¹² Throughout the past century, people have suggested permanent sites for the Games for various reasons, including security and human rights.¹¹³ However, site selection is left to the discretion of the IOC, and the IOC has stuck to its ambulatory system.

The Olympic Charter demands, however, that the IOC “encourage and support a reasonable concern for environmental issues, to promote sustainable development in sport and to require that the Olympic Games are held accordingly.”¹¹⁴ The current system of Olympic site selection does not appear to support “reasonable concern for environmental issues” and “sustainable development.”¹¹⁵ If there is an alternative system that is feasible and better achieves these objectives, that system should be adopted.

Additionally, in December 2018, the IOC committed to the Sport for Climate Action Framework.¹¹⁶ With its commitment, the IOC pledged to be a “leader” in the movement.¹¹⁷ The Sport for Climate Action

¹⁰⁸ The city will host both the Olympics and the Paralympics which, on average, are each two weeks within a six-week time frame.

¹⁰⁹ OLYMPIC CHARTER, *supra* note 4, at 11–12.

¹¹⁰ *Id.*

¹¹¹ Spotts, *supra* note 9, at 119.

¹¹² *Id.*

¹¹³ *Id.* at 120.

¹¹⁴ OLYMPIC CHARTER, *supra* note 4, at 17.

¹¹⁵ See *supra* Section *The Current Structure of Olympic Site Selection*.

¹¹⁶ *Sport for Climate Action*, U.N. FRAMEWORK FOR CLIMATE CHANGE, <https://unfccc.int/climate-action/sectoral-engagement/sports-for-climate-action> (last visited Jan. 27, 2020).

¹¹⁷ *Id.*

Framework articulates two overarching goals: (1) “Achieving a clear trajectory for the global sports community to combat climate change, through commitments and partnerships according to verified standards, including measuring, reducing, and reporting greenhouse gas emissions, in line with the well below 2-degree scenario enshrined in the Paris Agreement;” and (2) “[u]sing sports as a unifying tool to federate and create solidarity among global citizens for climate action.”¹¹⁸ In line with its pledge to be a “leader” in achieving these goals, and in complying with the Olympic Charter, the IOC seemingly has a duty to fairly examine alternative systems for Olympic site selection.

III. APPLYING THE NEPA FRAMEWORK TO ANALYZE ALTERNATIVE STRUCTURES

The central question faced by the IOC is simple: Does systemic change to Olympic site selection better fulfill the IOC’s mission? A NEPA-style analysis is one tool the IOC can use to answer this question. This section gives an overview of the National Environmental Policy Act. Then, it begins to outline how the IOC can apply NEPA to better fulfill its mission.

A. *The National Environmental Policy Act*

In 1969, the United States Congress passed the National Environmental Policy Act (“NEPA”), creating a national framework for protecting the environment.¹¹⁹ NEPA requires a “detailed statement,” otherwise known as an Environmental Impact Statement (“EIS”) for all “major federal actions significantly affecting the quality of the human environment.”¹²⁰ An EIS analyzes the environmental impacts of proposed and alternative actions, each of which the actor could take to achieve an articulated goal.¹²¹

NEPA does not mandate a substantive outcome.¹²² In other words, it does not mandate that the actor select the alternative with the smallest

¹¹⁸ *Id.*

¹¹⁹ *Summary of the National Environmental Policy Act*, U.S. EPA, <https://www.epa.gov/laws-regulations/summary-national-environmental-policy-act> (last updated Aug. 15, 2019).

¹²⁰ 42 U.S.C. § 4332 (2018).

¹²¹ *Id.*

¹²² *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989).

environmental impact.¹²³ NEPA merely requires a detailed analysis prior to an impactful decision.¹²⁴ It wants actors to “look before they leap” into action.¹²⁵ NEPA is all about fostering good decision making, ensuring the acting party considers all environmental consequences in that process.¹²⁶

NEPA is an instrument the IOC can use to consider altering Olympic site selection. A NEPA-style analysis will help the IOC see a full picture of its alternatives. The IOC can then select the alternative best in line with its duties and goals. Although a substantive requirement—mandating the IOC choose the alternative best for the environment—would be preferable to many, it may scare the IOC away from doing an alternatives analysis at all. NEPA’s lack of substantive requirement may encourage the IOC to actually partake in the analysis and, hopefully, come to the best conclusion on its own.

B. Applying the NEPA Framework to Evaluate Alternative Structures for Olympic Site Selection

The IOC’s analysis should parallel an EIS as closely as possible. This analysis will create a matrix of alternatives for the IOC to compare on equal footing. The IOC can then conclude whether systemic change to Olympic site selection best fulfills its mission, and if so, identify the preferred alternative.

The following sections outline what an EIS prepared by the IOC would entail. This is meant to be a skeletal sketch and is merely a suggestion. The IOC may elect to alter its analysis as appropriate, since the IOC is not bound by the procedural requirements of NEPA.

As applicable here, an EIS contains the following parts: a statement of purpose and need; a description of alternatives; a description of the affected environment; and an assessment of the environmental consequences of each alternative on the affected environment.¹²⁷

1. Statement of Purpose and Need

The statement of purpose and need articulates the IOC’s objective.¹²⁸ Here, the IOC needs a structure for Olympic site selection that conforms

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.*; see also *What is NEPA?*, PROTECT NEPA, <https://protectnepa.org/what-is-nepa> (last visited Jan. 27, 2020).

¹²⁶ *Thomas v. Peterson*, 753 F.2d 754, 760 (9th Cir. 1985).

¹²⁷ 42 U.S.C. §4332 (2018); 40 C.F.R. § 1502.10 (2012).

¹²⁸ See 40 C.F.R. § 1502.13 (2012).

to the Olympic Charter and its new pledge under the Sport for Climate Action Framework. Accordingly, the statement of purpose and need might read: “A framework for Olympic site selection that will result in sites that can feasibly host the Games, promote environmental concern, and be environmentally sustainable.”

2. Description of Alternatives

The IOC would then identify and describe a reasonable range of alternatives, including a no action alternative.¹²⁹ “Reasonable alternatives” are those that fulfill the statement of purpose and need.¹³⁰ For example, and for the purposes of this Note, these alternatives may include: the no action alternative, five rotating permanent locations, or one permanent location for the Summer Games and one permanent location for the Winter Games. The IOC can decide if other alternatives are reasonable and worth consideration.

i. The No Action Alternative

The first alternative is the no action alternative. The no action alternative is the current bidding system including the changes implemented under OA 2020.¹³¹ The IOC picks the Olympic site from among cities that voluntarily bid to host the Games. The host city then controls most of the planning and execution of the Games.

ii. Five Rotating Permanent Locations

The second alternative could be five rotating permanent locations for the Games. The five locations could be popular as a way to symbolize the five Olympic rings.¹³² Selecting five permanent locations is consistent with the Olympic Charter if the locations promote environmental concern and demonstrate sustainability. The permanent sites could function as a neutral territory, a “sort of Olympic Vatican.”¹³³ Each Games could be co-hosted by the IOC and another country. The host country could vary among all participating countries, rather than always being the territorial host. The host country could help create the theme of the Games, help staff

¹²⁹ 40 C.F.R. § 1502.14 (2012); 40 C.F.R. § 1508.25 (2019).

¹³⁰ See *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 709 (10th Cir. 2009).

¹³¹ See *supra* Section *The Current Structure of Olympic Site Selection*.

¹³² The five rings symbolize the interlocking of the five major continents.

¹³³ Spotts, *supra* note 9, at 119. There are many political, social, and economic issues to consider in this scenario, but they are beyond the scope of this Note. These include how the IOC would acquire the land and how it would be used outside of the Olympic Games.

the Games, and retrieve some revenue from the Games. This alternative provides opportunity for more countries and cultures to be represented. Alternatively, the Games could be hosted entirely by the IOC, which would distribute revenue to countries equally. The five locations could be used outside the Games for other events, recreation, and tourism. Such uses could include other international sporting competitions, public recreation areas, concerts, museums, and conferences.

Locations may be chosen using factors such as past success hosting the Games, the government stability of the country, and reliability of climate. Importantly, the IOC is advised to consider the ability of locations to host the Games in the future in the face of climate change. The IOC could then choose its “permanent host” cities based upon the best available scientific knowledge about the long-term ability of the cities to host the Summer and Winter Games. Numerous studies exist that forecast such capability. For example, one peer-reviewed study looked at cities that, based on current climate projections, would be capable of hosting the Summer Games in 2085.¹³⁴ Another study projected cities capable of hosting the Winter Games in the 2080s.¹³⁵ Drawing on these studies, for example, the five sites could be: Stockholm, Sweden (Summer), Amsterdam, Netherlands (Summer), London, UK (Summer), Salt Lake City, Utah, USA (Winter), and St. Moritz, Switzerland (Winter).¹³⁶

iii. One Permanent Site for the Summer Games and One Permanent Site for the Winter Games

The third alternative might be one permanent location for each Summer and Winter Games. This alternative would place the Summer Games and the Winter Games each in a single, permanent location. These locations could be chosen through a process similar to that described in alternative two. For example, the locations could be: London, UK (Summer) and Salt Lake City, Utah, USA (Winter).¹³⁷

¹³⁴ Kirk R. Smith et al., *The last Summer Olympics? Climate change, health, and work outdoors*, 388 THE LANCET 642, 642 (2016), [https://www.thelancet.com/journals/lan/article/PIIS0140-6736\(2016\)2931335-6/fulltext](https://www.thelancet.com/journals/lan/article/PIIS0140-6736(2016)2931335-6/fulltext).

¹³⁵ D. Scott et al., *The future of the Olympic Winter Games in an era of climate change*, 18 CURRENT ISSUES IN TOURISM J. 913, 913 (2014), <https://www.tandfonline.com/doi/full/10.1080/13683500.2014.887664>.

¹³⁶ Smith et al., *supra* note 134, at 643; Scott et al., *supra* note 135, at 926.

¹³⁷ Smith et al., *supra* note 134, at 643; Scott et al., *supra* note 135, at 926.

C. Description of the Affected Environment

The IOC should “describe the environment of the area(s) to be affected or created by the alternatives under consideration.”¹³⁸ This will largely depend on how the IOC defines the “scope” of the analysis.¹³⁹ Generally, the affected environment should encompass aspects of the environment directly and indirectly impacted by the Games—features that retain a “reasonably close” link to the Games.¹⁴⁰ The IOC may include species, land use, human health, air quality, water quality, and people living in that region. The proximity of effects considered is something for the IOC, scientists, and the public to decide.

D. Environmental Consequences of Each Alternative on the Affected Environment.

This section will form the “scientific and analytic basis” for comparing the alternatives.¹⁴¹ Each environmental consequence, or impact, should be examined with respect to that impact’s effect on the affected environment under each alternative.

Impacts to be analyzed should include direct, indirect, and cumulative impacts.¹⁴² They may include changes in land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Other impacts may include greenhouse gas emissions, and infrastructure construction, destruction, and abandonment. They may also include dislocation of neighborhoods, wetlands, and other habitat, as well as transportation, water quality, air quality, congestion, waste, and population growth.

Cumulative impacts are those resulting from the “incremental impact of the action when added to other past, present, and other reasonably foreseeable future actions regardless of [who] undertakes such other actions.”¹⁴³ Here, cumulative impacts should include the impacts of past and future Games on climate change. The 2018 UN Climate Report should be considered along with other best available science.

¹³⁸ 40 C.F.R. § 1502.15 (2019).

¹³⁹ 40 C.F.R. §§ 1501.7, 1508.25 (2019).

¹⁴⁰ *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983); *See also* 40 C.F.R. § 1501.7 (2019).

¹⁴¹ 40 C.F.R. § 1502.16 (2019).

¹⁴² 40 C.F.R. § 1508.25 (2019).

¹⁴³ 40 C.F.R. § 1508.7 (2019).

Ultimately, the IOC gets to decide the scope of impacts considered.¹⁴⁴ Because this is a complicated analysis with seemingly unlimited variables, the IOC should decide what impacts and factors are most important. For example, under the no action alternative, the IOC may or may not choose to look at the likelihood of cities reusing stadiums and transportation systems, and how reuse affects land use, species, congestion, and waste. The IOC could also consider impacts less related to the environment, such as security, human rights, cultural representation, doping control, and cost.

After its analysis, the IOC would effectively have a matrix of alternatives. The table below provides an oversimplified visual—the blank boxes would be filled in with the gathered information. With all the information in one place, the IOC can compare the alternatives side-by-side and make an informed decision.

¹⁴⁴ 40 C.F.R. § 1501.7, 1508.25 (2019).

Alternative:	No action alternative	5 Permanent Sites	2 Permanent Sites
Impact:			
Emissions			
Transportation			
Environmental Justice			
Waste			
Education & Research			
Control & Accountability			
Economy & Revenue Distribution			
Doping			
Human Rights			
Cultural Representation			
Security			

*Figure 1*¹⁴⁵

For example, the IOC could examine the impact of transportation. Transportation choices may affect emissions, land use, habitats, and human health and safety, among other things. The IOC would compile a report on the direct, indirect, and cumulative impacts of transportation under all three alternatives. The report may include: (1) cost to build and implement, (2) net emissions, (3) land use changes, (4) relocated neighborhoods, (5) security systems needed, (6) sanitation and human

¹⁴⁵ This is a proposed, although simplified, table the IOC can use to compare the alternatives side-by-side and make an informed decision for site selection.

health, (7) prospects for reuse and improvement, and (8) ability to provide education to other nations about this infrastructure.

Under the no action alternative, the IOC would compile its report based on previous Games, such as the Salt Lake City, Beijing, and Rio Games, and planned future Games, such as Paris in 2024 and Los Angeles in 2028. Then, the IOC will compare its findings to projections under the permanent location scenarios.

The IOC will likely find that permanent locations require a large up-front cost to implement transportation systems. However, the IOC might have newfound control over the types of transportation, where new infrastructure is located, and how transportation operates during the Games and outside the Games. This could minimize adverse effects on the human environment, such as on existing neighborhoods, species' habitat, and air quality. Permanent locations could endorse reuse and improvement each Olympic cycle, allowing the IOC to implement the best available technology to minimize environmental impacts, safety concerns, and other issues. Additionally, the IOC could improve its reputation and be a model for the world by educating other countries about sustainable transportation systems.

The IOC would conduct this type of analysis for each impact. When the matrix comparing alternatives is complete, the IOC can assess whether systemic change is warranted as the best way to fulfill its mission. This educated decision making is the goal of such a NEPA-style analysis.¹⁴⁶

CONCLUSION

The IOC labels itself a world leader in confronting climate change.¹⁴⁷ Moreover, the Olympic Charter mandates that the IOC ensure the Games are held in accordance with principles of environmental concern and sustainability.¹⁴⁸ In the face of unprecedented climate threats, the IOC should at least reevaluate the system of Olympic site selection, to ensure it fosters real environmental sustainability. The IOC should recognize alternatives, such as permanent locations, and use a NEPA-style analysis to make an informed decision about whether systematic change is warranted.

¹⁴⁶ See *Thomas v. Peterson*, 753 F.2d 754, 760 (9th Cir. 1985).

¹⁴⁷ *IOC Takes Leadership Role in the UN Sports for Climate Action Initiative*, OLYMPIC.ORG (Dec. 11, 2018), <https://www.olympic.org/news/ioc-takes-leadership-role-in-the-un-sports-for-climate-action-initiative>.

¹⁴⁸ OLYMPIC CHARTER, *supra* note 4, at 17.