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The Mega-Event Syndrome

Why So Much Goes Wrong in Mega-Event Planning and What to Do About It

Martin Müller

Problem, research strategy, and findings: Mega-events such as the Olympic Games and the Football World Cup have become complex and transformative undertakings over the last 30 years, with costs often exceeding USD \$10 billion. These events are currently planned and governed in ways that produce adverse effects for cities, regions, and residents. This study identifies a *mega-event syndrome*, a group of symptoms that occur together and afflict mega-event planning, including overpromising benefits, underestimating costs, rewriting urban planning priorities to fit the event, using public resources for private interest, and suspending the regular rule of law. I describe each of these symptoms, providing empirical examples from different countries and mega-events, examining the underlying causes. The research is based on material from field visits to mega-event sites in 11 countries as well as 51 interviews with planners, managers, politicians, and consultants involved in mega-event planning.

Takeaway for practice: To curb the mega-event syndrome, I propose both radical and incremental policy suggestions. The most crucial radical change that an event host could make is to not tie mega-events to large-scale urban development, avoiding higher risks that create cost overruns, substandard construction quality, and oversized infrastructure not suitable for post-event demands. Further, event hosts should bargain with event-governing bodies for better conditions, earmark and cap public sector contributions, and seek independent advice on the costs and benefits of mega-events. Event-governing bodies, for their part, should reduce the size and requirements of the events.

Mega-events are one-time occasions of a fixed duration that attract a large number of visitors and have worldwide reach. They come with significant costs and long-term impacts on the built environment and the population of the host countries or cities. The Olympic Games and the Football (Soccer) World Cup are the largest mega-events, but events such as World's Fairs (Expos), regional games (e.g., Pan American Games, Asian Games), and single sports events such as the Super Bowl are also mega-events.

In the past three decades, mega-events have reached a size that has made them transformative ventures for entire cities, regions, and sometimes whole countries. Such events now routinely command more than USD \$10 billion in capital investment, take up several hundred acres of land, and require the infrastructure to accommodate, move, and keep secure hundreds of thousands of visitors and tens of thousands of athletes, officials, and journalists. Planning for mega-events appropriates resources, monopolizes public attention, can suspend the normal rule of law, and often rewrites urban and regional development plans. What were once primarily sports events or exhibitions have become urban events: occasions for large-scale urban transformation (Essex & Chalkley, 1998; J. R. Gold & Gold, 2008; Hiller, 2006; Kassens-Noor, 2012).

There is considerable disagreement about the nature of mega-event impacts. Cities and countries bidding to host the events often see them as boons to urban development, a view endorsed by event-governing bodies such as the International Olympic Committee (IOC) and some consulting companies and

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development agencies (German Development Agency [GIZ], 2013; PricewaterhouseCoopers, 2011). Some scholars, too, have claimed that mega-events are catalysts for urban development and “accelerate [a city’s] infrastructural development by up to 10 years” (Preuss, 2004, p. 232). A few studies suggest that mega-events can create an economic benefit to host cities (Gratton, Shibli, & Coleman, 2005), and that cities and countries can leverage them to improve their image and empower community action (Chalip, 2006; Grix, 2012). A focus on planning for the legacies of mega-events—what is left after the event—has served to reinforce the idea that mega-events can be positive forces for urban development (Holt & Ruta, 2015; Jago, Dwyer, Lipman, van Lill, & Vorster, 2012).

At the same time, the negative impacts of mega-events on cities and regions are well documented and occur in almost every case. Cost overruns, schedule slips, oversized infrastructure, and social polarization dash the high expectations for positive urban development resulting from such events (e.g., Boykoff, 2014; Cottle, 2011; Gaffney, 2010; Hayes & Horne, 2011; Horne, 2007; Shin & Li, 2013). Thus, since 1960, without exception, the Olympic Games have gone over budget, on average by 179% (Flyvbjerg & Stewart, 2012). After the 1994 World Cup in the United States, host cities experienced a net economic loss rather than the predicted gain (Baade & Matheson, 2004). The Olympic Summer Games in Athens cost at least 3.4% of

the gross domestic product (GDP) of Greece at the time and left a legacy of underused sports facilities and environmental destruction (M. M. Gold, 2007). In Rio de Janeiro, preparations for the 2014 Football World Cup and the 2016 Olympic Games exacerbated sociospatial polarization, as authorities evicted and resettled tens of thousands of residents (de Paula, 2014).

In this study, I suggest that there are common dynamics that plague mega-event planning everywhere in the world to a greater or lesser degree, or what I call the *mega-event syndrome*. The concept of “syndrome,” drawn from medicine, suggests the presence of a set of symptoms that occur together, recognizing that these symptoms may be interrelated and have shared underlying causes (Schellnhuber et al., 1997). On the basis of 51 interviews with mega-event planners, managers, politicians, and consultants; field visits to mega-event sites in 11 countries; and official documents, polls, and media reports, I identify seven major symptoms that together form the mega-event syndrome and are shown in Table 1: overpromising benefits, underestimating costs, event takeover, public risk taking, rule of exception, elite capture, and event fix. Investigating these symptoms together allows us to see them as the result of a shared complex of problems, shifting the focus toward the causes and drivers of negative outcomes. In so doing, I propose both radical and incremental policy suggestions to reduce the prevalence and size of the mega-event syndrome for future hosts.

Table 1. The mega-event syndrome: symptoms and consequences.

Symptom	Description	Consequences
1. Overpromising of benefits	Overestimating positive effects of mega-events	<ul style="list-style-type: none"> • Misallocation of resources • Loss of trust with citizenry
2. Underestimation of costs	Actual budget > planned budget	<ul style="list-style-type: none"> • Misallocation of resources • Profiteering • Subpar construction quality • Budget shortfalls
3. Event takeover	Event priorities become planning priorities	<ul style="list-style-type: none"> • Event needs displace urban infrastructure needs • Oversized infrastructure • Unfinished infrastructure
4. Public risk taking	Public takes risk for private benefits	<ul style="list-style-type: none"> • Public funds for limited or no public benefits • Profiteering
5. Rule of exception	Suspension of regular rule of law	<ul style="list-style-type: none"> • Displacement • Reduced public oversight • Limited public participation
6. Elite capture	Inequitable distribution of resources	<ul style="list-style-type: none"> • Spatially uneven urban landscape • Gentrification
7. Event fix	Mega-events become seemingly quick fixes for major planning challenges	<ul style="list-style-type: none"> • Event determines national priority for funding • Bypassing of regular planning process • Waste of resources on event as lever for urban development

Research Approach and Materials

The primary empirical basis for this study rests on 51 semistructured interviews and material from field visits to mega-event sites in Brazil (Rio de Janeiro), China (Beijing), Canada (Calgary, Vancouver), Germany (Berlin, Munich), Italy (Torino), Korea (Gwangju, Seoul, Yeosu), Russia (Kazan, Moscow, Sochi), Spain (Sevilla), Ukraine (Lviv), the United Kingdom (London), and the United States (Salt Lake City [UT]). I used site visits to collect firsthand material on the planning and afteruse of mega-event facilities in a range of countries to avoid a national bias in the analysis.

I conducted the interviews between 2010 and 2014 with staff from event-governing bodies (the IOC and FIFA [Fédération Internationale de Football Association, the governing body for the Football World Cup]), organizing committees, consultants to cities and organizers, politicians, and planners. I selected interviewees who had a strategic, not just an operational, role in the planning and preparation of mega-events or in managing the infrastructure after the event across a number of functional areas such as transport, environment, venue planning, accommodation planning, and knowledge management. I avoided a potential sampling bias that could have occurred when focusing on just one area of mega-event planning. All potential interviewees, except two, were available and willing to speak with me. In those two cases, I contacted people with similar functions.

The interviews covered the following thematic areas: the rationale for bidding and the process of assembling the bid documents; the guiding principles and priorities of planning for and managing the event and the period afterwards; challenges, tradeoffs, and unexpected events during the planning process; the influence of different stakeholders on the planning and management process and on outcomes; positive and negative outcomes; and the reasons why some outcomes differed from initial expectations. The exact questions varied according to the role of the person interviewed and the specific mega-event. I used an interview guide for conducting interviews that contained open-ended questions reflecting these areas of inquiry. While I did not share the exact questions in advance, I did outline the general theme of the interview in all my requests.

I took several steps, common for qualitative methods (see McMillan & Schumacher, 1997), to establish that the material collected was valid and that I correctly understood the responses made by those I interviewed. First, I made sure that interviewees were comfortable

with the interview language. Most interviewees were fluent in English, so I conducted most interviews in English. In one case the interviewee preferred Russian, and in one case the interviewee preferred German, both languages I speak fluently. Second, I audio-recorded all interviews, after receiving permission, and transcribed them in the original language to allow for exact reproduction.

After each of the first five interviews, I revised the guide where I thought interviewees had not understood the intent of the questions or the wording of questions was imprecise. I also asked interviewees if they agreed with statements made by other interviewees to determine the level of agreement. I then coded interviews into themes and subthemes to compare the material across interviewees and field sites. I did not work with a preestablished codebook, but generated codes from the material to reduce the risk of preconceived ideas influencing how I structured the material.

When I quote material here, I rely on experiences that interviewees reported more than once to avoid basing the analysis on unusual statements. During the site visits, I was able to compare the statements of those interviewed against my own observations.

I believe this method is a conservative approach to understanding the critical aspects of mega-event planning because I interviewed people who may have an interest in downplaying the problems and the challenges of mega-events in which they themselves were involved. My approach guards against an excessively pessimistic stance that could result from interviewing those opposed to mega-events. Moreover, these interviews and my interpretation of the responses are the result of five years of fieldwork on various mega-events.

In addition to interviews and site visits, I use material such as bidding documents and hosting guidelines, surveys, and media reports, which are publicly available. To complement this primary material, I integrate additional evidence from the existing academic literature on mega-events. These materials form the basis for extracting the seven symptoms of the mega-event syndrome, which I describe below.

The Mega-Event Syndrome

Symptom 1: Overpromising of Benefits

This symptom refers to the mismatch between the expected and the actual benefits of a mega-event. This is particularly evident in the bid book, the document organizers submit to an event-governing body such as the IOC

or FIFA as an application to host the event. The bid book makes promises about the outcomes of the event and becomes part of the contract between a host and the event-governing body. Bid books promulgate a vision of urban transformation, with associated costs and benefits. They serve as key documents for decision-makers to evaluate whether to host an event and fund the expenditure.

Yet, the promises in bid books are not a realistic statement of what cities want to do and can achieve with the event-governing bodies. As one member of staff in an organizing committee stated:

The bid book is science fiction—an imaginary case.... International consultants put into the bid book what they knew that the IOC would like and buy, and when we got the Games it was all of a sudden like, “Whoaaa, we have to deliver on all that and we had no idea how to do that.” (interview with staff of organizing committee)

Overpromising is also widespread when prospective hosts forecast the economic impacts of mega-events. The mayor of Chicago, for example, in the city’s bid to host the 2015 Olympic Games, promised that hosting the event would create 315,000 new jobs, a forecast more than four times the estimate for the Olympics in Atlanta (GA) in 1996 and dismissed as crazy by sports economist Victor Matheson (quoted in Pletz, 2009; see also Eisinger, 2000; Matheson, 2008). However unrealistic a given figure for economic impacts may be, it still produces an important psychological anchoring effect, creating the impression that mega-events come with economic gains (Tversky & Kahneman, 1974). Thus, in a survey in 16 countries, 68% of respondents reported that hosting the Olympic Games is an “opportunity for economic development” and 73% thought it “leaves the host city with many benefits” (Kantar, 2014).

Sports economists, however, are in rare unanimity that providing subsidies for mega-events is, at best, a suboptimal use of public money and incurs significant opportunity costs (Baumann & Matheson, 2013; Crompton, 1995; Jennings, 2012; Madden, 2006; Matheson, 2008; Mills & Rosentraub, 2013; Zimbalist, 2015). The 1994 Winter Olympic Games in Lillehammer, for example, cost 100 times more than a tourism development program the Norwegian government ran in parallel, yet the increase in overnight stays due to the Games was only twice as large as that of the tourism program (Teigland, 1999).

Despite this poor record, cities and countries continue to bid for mega-events because the event promoters tend to profit most from such events. Mega-events bring prestige

for sports officials; profit for property developers, construction firms, and landowners; and a chance to shine for politicians. It is this unequal distribution of costs and benefits (see Logan & Molotch, 1987) that continues to produce bids, although the promised benefits hardly ever materialize.

Symptom 2: Underestimation of Costs

This symptom is the alter ego of overpromising benefits. Like most mega-projects (Flyvbjerg, Holm, & Buhl, 2002; Priemus, Flyvbjerg, & van Wee, 2008), mega-events overrun their budget, sometimes massively so. The most blatant example is the 2010 Commonwealth Games in New Delhi (India); initially estimated to cost about USD \$50 million, the actual total budget was more than USD \$4 billion (INR 280 billion; High Level Committee for Commonwealth Games 2010, 2011). The Olympic Games always overrun their initial budget. The average cost overrun for the Olympic Games since 1960, including operating and direct capital costs, is 179%: much more than the 27% average overrun for transport mega-projects (Flyvbjerg & Stewart, 2012).

Many factors drive organizers to underestimate the costs of mega-events. First, unlike other mega-projects, mega-events have a *fixed deadline*. Postponing the opening date is not an option when preparations fall behind schedule, so event organizers will hire additional workers or add nightshifts. In addition, when construction has to be rushed, competitive bidding (tendering) rules are relaxed, reducing competition and driving prices up further.

Second, mega-events cannot be gradually ramped up; they are *nondivisible* (i.e., all competitions need to run from day one at full force). Thus, there is no room for trial and error, and that comes with a high cost. Third, when work is running late, contractors engage in *profiteering*; they know that event organizers are dependent on them to finish work in time. The closer the opening date looms, the more contractors will ask for large premiums to finish work in time. Fourth, mega-event planners operate with *large contingencies*, lacking knowledge about the demand patterns during previous events in other cities. They build infrastructure larger than needed because there is substantial uncertainty about the demand, such as for public transport on a particular day during the event. This uncertainty results from the exceptional character of the event and is exacerbated by lack of knowledge of usage at previous events.

Fifth, mega-events have a *long implementation period*, often more than 10 years from the initial idea to the final execution. During this time, many of the initial assumptions are subject to change. Inflation, for example, can

increase due to the additional demand that a mega-event creates. External events, such as terrorist attacks, can increase costs for security. New regulations or demands can make it necessary to expand the scope of the budget. What compounds this uncertainty is that the event-governing bodies tend to leave some requirements deliberately vague in their contracts with host cities, postponing concrete specifications to a later stage, as in the FIFA Host City Agreement. This makes it difficult for cities to engage in reliable advance planning and budgeting and increases the risk of changes at short notice that increase costs.

Sixth and last, there is an incentive for event promoters to *misrepresent the true cost* of an event. There are two main reasons for this. Bids need to garner public support, both because governing bodies of the events demand that a majority of the population be in favor of the event and because in many countries the public or the government can—but do not have to—initiate referenda on bids. Munich, St. Moritz, and Krakow, for instance, had to withdraw from bidding for the 2022 Winter Games because of failed referenda. Also, potential host cities compete at the national level for nomination as the national candidate for the event, often with guarantees of public subsidies. It is imperative that a proposed project looks as inexpensive as possible to engage public support and improve chances for nomination as the national candidate with the attached national subsidies.

Symptom 3: Event Takeover

Mega-event priorities often displace long-term urban development priorities. Instead of the event becoming an instrument for urban development, urban development becomes the instrument for the event. The most extreme example is perhaps Rio de Janeiro, which in the space of 10 years hosted the Pan American Games (2007), the Football World Cup (2014), and the Olympic Games (2016), ending up “with an urban structure that was—for over two decades—purely driven by sporting events” (Kassens-Noor, 2012, p. 105). The mayor of Rio, Eduardo Paes, acknowledged that mega-event priorities are what drive Rio’s development planning: “The Olympic plan is Rio’s plan, and Rio’s plan is the Olympics” (quoted in Nuzman, 2011).

Event takeover has two major characteristics. The first is that event requirements crowd out actual urban infrastructure needs, both in spatial and financial terms. Venues for hosting an event occupy space, often in prime locations of a city, that could be used for other public facilities with broader or more sustained public benefit. The venues for the Summer Olympics, for example, require an area of almost 700 hectares (1,730 acres), not including ancillary infrastructure such as the Olympic Village, ceremonial

spaces, parking areas, etc. (Long, 2013). These requirements increase competition for the use of scarce urban land in densely populated cities.

But crowding out also happens in a financial sense: As the event nears and budgets are squeezed, sports-related facilities prevail over wider urban improvements. Stadia, athlete accommodation, media centers, airport extensions—all of them contractual obligations to the governing bodies of the event—appropriate budgets originally meant to improve housing, community facilities, or public transport, undermining long-term urban development priorities and public preferences.

Second, building for the demands of the event often does not reflect post-event needs. Fulfilling the requirements of event-governing bodies for airport or public transit capacity, for example, requires the host city to tailor the size of the project to peak event demand, which is often too large for efficient post-event use. Since event-governing bodies set the requirements for infrastructure, but do not pay for its delivery, they have an incentive to demand excessively large stadia, airports, or hotel capacities. The airport in Lviv (Ukraine), upgraded to meet the requirements of UEFA, the governing body of the European Football Championship, now boasts a capacity of 20,000 passengers per day. However, it was running at 10% of that capacity in 2013, one year after Ukraine hosted the championship.

Building many event venues in the same area exacerbates the problem of oversized infrastructure. This risk is particularly high for Olympic parks, which have several stadia with large seating capacities. To accommodate the transit demand during the event, organizers build large capacities and plan rail transit lines to optimize the movement of event visitors. However, these arrangements often do not reflect the post-event demands. After the 2014 Winter Games in Sochi (Russia), for example, the combined road and rail link between the airport and the venue clusters, built for more than USD \$10 billion, became too expensive to operate. Sydney (Australia), too, built a transit system for the 2000 Summer Games that was too large for post-event use; moreover, its route system is not geared to post-event travel patterns (Kassens-Noor, 2012).

Symptom 4: Public Risk Taking

The public sector provides the deficit guarantee demanded by event-governing bodies in almost all cases, thus accepting the risk of failure. The government must deliver the defined facilities and infrastructure and cover all budget shortfalls, while the profits accrue to the event-governing bodies and the contractors. This guarantee encourages

profiteering: Contractors know that the government is obliged to finish the project regardless of price.¹

Cities hosting mega-events portray them as a way of attracting private capital in an environment of increasing interurban competition (Andranovich, Burbank, & Heying, 2001; Burbank, Andranovich, & Heying, 2002; French & Disher, 1997; Hall, 2006). But investors tend to be wary of investing in sports facilities and ancillary infrastructure (Long, 2012; see Rosentraub [1999] for the case of sports facilities in the United States). The taxpayers almost always pay a higher share for the event than planned. The organizers of the 2014 Football World Cup in Brazil and the 2014 Winter Games in Russia expected private investment to make up most of the funding for the event, but in both cases the public was forced to pay more than 95% of the costs (Fund for the Fight Against Corruption, 2014; Gaffney, 2014). London and Vancouver tried to attract private investors for the Olympic villages, but had to bail them out after the financial crisis (Scherer, 2011).

Symptom 5: Rule of Exception

Mega-events are exceptional happenings and so, too, is the time during which the hosts prepare for them. The preparation for most mega-events includes special legislation that suspends the regular rules to facilitate hosting the event (Coaffee, 2014; Sánchez & Broudehoux, 2013). Many governments pass laws that introduce exceptions in areas such as taxation, immigration, property rights, urban planning, and freedom of speech. Governments, for example, have to provide tax exemptions on some revenues accruing to event-governing bodies and award franchises or monopolies that go beyond existing legislation (Louw, 2012). For the World Cup in Brazil, tax authorities estimated that these exemptions would cost roughly USD \$250 million (BRL 559 million) in foregone tax revenue (de Paula, 2014).

But cities and countries may also curtail citizen rights without explicit requirements from event-governing bodies. Vancouver, for example, introduced a bylaw outlawing placards, posters, and banners that did not celebrate the Olympic Games in 2010 (Boykoff, 2011). The mayor of Boston signed a decree that forbade city employees from criticizing the Olympics during the city's bid to host the event in 2024 (Levenson, 2015). Both cities, however, had to repeal these decisions following legal challenges.

It is common for hosts to expropriate private property and displace residents during the run-up for a mega-event in democratic and authoritarian countries alike (Centre on Housing Rights and Evictions [COHRE], 2007; Porter et al., 2009). Targeted legislation facilitates expropriation and displacement (Davis, 2011; Olds, 1998). A special report by

COHRE, a nongovernmental organization (NGO) supporting the cause of equal housing rights, states that several hundred to several thousand people were displaced for a number of mega-events, mostly to clear the ground to build facilities to host the event (COHRE, 2007).²

Symptom 6: Elite Capture

Proponents often justify hosting a mega-event because it will create broad societal benefits. Yet, mega-event planning tends to privilege local business and real estate interests, global corporations, and the cronies of the political elites (Andranovich et al., 2001; Shaw, 2012; compare with Logan & Molotch, 1987). In Brazil, for example, several well-connected construction firms—known as the “four sisters”—pocketed the lion's share of public contracts for the 2014 World Cup, producing vast cost overruns (Belisário, 2014). Moreover, new infrastructure often gives priority to airports, which cater to the highly mobile strata of society. Even the sports stadia themselves have a tendency to turn into socially exclusive spaces if ticket prices multiply to recoup at least part of the high cost of the venues, as in Brazil (Gaffney, 2014).

Event-induced gentrification contributes to elite capture and is a phenomenon that has become a familiar sight in most mega-event host cities that harness events for urban regeneration, from Atlanta (Rutheiser, 1997) and Sydney to Vancouver (Lenskyj, 2008), London (Watt, 2013), and Rio (Gaffney, 2010). In Stratford in East London, where the Olympic Park is located, the Olympic Games accelerated gentrification and displacement of residents (Watt, 2013). Mega-events thus generate both the financial capital required for urban regeneration and the symbolic capital needed to make areas attractive for wealthier residents.

At the same time, elite capture curtails public oversight and participation. While event organizers want public support during the bid, the participation of the public is often considered expendable or is reduced once a city has won. Planning for mega-events then turns into a technocratic process of delivery and democratic demands become risks that threaten to delay the planning and construction process of the event (Raco, 2014; see also Andranovich et al., 2001; Hiller, 2000). Event-governing bodies sometimes perceive even democratic decision making as a nuisance, delaying and derailing the preparation for the event. Jérôme Valcke, Secretary General of FIFA, underscored that by saying, “Less democracy is sometimes better for organizing a World Cup” (quoted in Reuters, 2013).

Symptom 7: Event Fix

Event fix occurs when mega-events become seemingly quick fixes to fast-track major urban development projects:

a “shot of adrenalin” for cities to clean up their act and get projects done that would otherwise have stalled or never happened. As the deputy mayor of Lviv, host to the 2012 European Football Championship, said:

Hosting a mega-event is like when the aunt from Canada comes to visit—you repair the house, you make a spring cleaning—when over the whole year you keep throwing around the rubbish. (podium discussion, November 2012)

As a result, cities and countries spend large sums on hosting an event to justify or create enough pressure to attain the non-sports investments they want to pursue. The rule of exception provides support for doing this: For example, where proper environmental impact assessments, full tenders, or due diligence are considered too cumbersome, organizing a mega-event permits the short-circuiting of regular planning procedures.

Mega-events produce or force consensus where planning proposals may not have been able to do so, thus pushing through potentially contentious projects as necessities for the event. Mega-events also can serve as a lever to extract funds for local governments from the central government. As the former mayor of London, Ken Livingstone, said:

I didn't bid for the Olympics because I wanted three weeks of sport. I bid for the Olympics because it's the only way to get the billions of pounds out of the Government to develop the East End. (quoted in Davies, 2008)

As a consequence, the central government allocates funding for urban development, not based on proven need or whether the projects support local master plans, but on whether a city manages to be successful in bidding for an event. Mega-events thus become a wildcard, allowing cities to jump to the front of the queue for government support.

Policy Suggestions

Cities, national governments, and governing bodies of events all have good reasons to reduce the negative fallout from mega-events. Cities, national governments, and citizens should want to avoid cost overruns, inefficient allocation of resources, and oversized infrastructure.³ Event-governing bodies, such as the IOC for the Olympic Games or FIFA for the Football World Cup, are concerned about their reputation, which constitutes their key capital. They also worry about losing potential hosts if cities start to perceive mega-events as expensive burdens. Among event-governing bodies, the IOC has been the most active in pursuing reforms, attempting to reduce the size of individual mega-events, integrate each one with urban development, and maximize the use of existing or temporary infrastructure.⁴

But why is it so difficult to offset the mega-event syndrome? First, the IOC and other event-governing bodies set the minimum size of infrastructure, but they cannot set the maximum size. Thus, even if the governing bodies set lower requirements, local organizers may not translate those requirements into smaller infrastructure investments and expenditures. Second, elites organize the bid for an event in most host countries and cities, precisely because they profit most from the events (see Logan & Molotch, 1987). Hosts continue to bid because of the unequal distribution of costs and benefits, despite negative outcomes for cities and regions as a whole. Third, the spectacular character of mega-events grips people and fires their imaginations, often sidelining rational deliberations about an event's benefits and costs, especially during the bidding phase. The fantasies attached to these events often turn out to be illusory the closer the event draws, but then it is too late for second thoughts.

At the policy level, as Table 2 illustrates, there are two avenues to address the mega-event syndrome. The first is *radical changes*: changes to the rules and legal preconditions

Table 2. Policy changes for curbing the mega-event syndrome.

Radical Changes	Symptoms addressed	Incremental Changes	Symptoms addressed
Avoid tying mega-events to large-scale urban development	1, 2, 3, 5, 7	Seek public participation beginning in the bid stage	3, 4, 6
Bargain with event-governing bodies	2, 3, 4	Fix terms of hosting agreement at the time of bidding	3
Cap and earmark public expenditure	2, 3, 4, 7	Create a separate organization in charge of legacies	3, 4
Seek independent expert assessments	1, 2, 3	Decentralize the event	3
Reduce or cap size and requirements of events	1, 2, 3, 4, 5	Build temporary structures where afteruse is uncertain	3
		Engage in knowledge exchange	2, 3
		Do not bypass regular planning procedures	5, 6

of awarding, hosting, and funding mega-events. These require a change in attitude among policymakers, city administrations, event managers, and event-governing bodies. But these changes will often not occur without pressure, through media, social movements, referenda, or from corporate sponsors of the event. The second avenue to address the mega-event syndrome is through *incremental changes* to the current rules and policies. These policy changes are easier to implement, but they are also less effective.

Two main actors are responsible for implementing these changes—hosts and event-governing bodies—and in many cases both need to work together for a change to be most effective.

Radical Changes

Avoid Tying Mega-Events to Large-Scale Urban Development. Cities need to change the current trend of tying large-scale development projects to mega-events. They have to establish, before starting to bid, whether the events require extensive new construction or upgrading of existing infrastructure. If so, cities have three options: Bid for smaller events; build the required infrastructure before the bid, but only if it aligns with the master plan; or do not bid at all. Event-governing bodies could support this change by preferring bids with existing infrastructure.⁵ The 1984 Summer Olympic Games in Los Angeles is one example where organizers relied to a large degree on existing infrastructure (see Burbank et al., 2002), thus reducing many symptoms of the mega-event syndrome.

Bargain With Event-Governing Bodies. The IOC, FIFA, UEFA, and others are monopolies that can dictate their terms and make substantial risk-free income, as long as there is enough demand for their events. Host cities should attempt to gain concessions from event-governing bodies, including fewer requirements, full taxation of revenues, waiving government guarantees, or additional contributions to cover the cost of hosting.

But one of two things needs to happen to allow better bargaining with the governing bodies. The first is that interest in bidding for an event needs to drop substantially, which is what happened after the excesses of the 1976 Olympic Games in Montréal, when Los Angeles was the only bidder for the 1984 Olympics. As a result, Los Angeles was able to wring significant concessions from the IOC.

Second, those interested in bidding must band together to bargain with event-governing bodies for better conditions, thus contesting monopoly power. If this collective bargaining does not happen, interested bidders

could negotiate individually. Oslo, a bidder for the 2022 Winter Games, was able to win concessions from the IOC to bear part of its costs (Butler, 2014). However, the success of bargaining depends on the willingness of the event-governing body to make concessions, the demand for the event, and the bargaining power of the host. Large markets such as the United States will exercise more power than smaller markets such as South Korea.

Cap and Earmark Public Expenditure. The hosts should cap expenditures and earmark the funds to avoid having the public sector compensate for mega-event cost overruns and ventures that lose money. Capping expenditures reduces the risk of profiteering and overspending; earmarking prevents funds for urban development from being diverted to hosting the event itself. Host cities should involve the private sector in risk taking to ensure the commercial viability of facilities and to reduce the exposure of the public sector. Cities and governments should not give blanket guarantees to cover all costs.

In addition, national governments should not provide extra funding for urban development to support mega-events; this encourages bidding for mega-events just for the sake of extracting these funds. Making funding decisions this way raises the total cost of infrastructure delivery to society and perverts other ways of determining funding priorities, such as regional and national infrastructure planning processes. Of course, the degree to which a host can enforce a spending cap will depend on legal and economic circumstances.

Seek Independent Expert Assessments. Independent expert advice is crucial for decision-makers in the cities, national governments, organizing committees, and governing bodies of the event. Such advice could take the form of reference class forecasting, a method that compares the predicted costs and benefits of a large number of mega-events—the so-called reference class—with the actual ones after the events have taken place. This approach determines how much predicted and actual costs and benefits diverged, and provides a better assessment of the bidding documents (Lovallo & Kahneman, 2003).

Reduce or Cap Size and Requirements of Events. Reversing the constant growth of mega-events would reduce the size of the required venues and infrastructure and thus the risk of event takeover, the complexity of the management and thus the risk of cost overruns and benefit shortfalls, and the size of the overall building program and thus the necessity to introduce extralegal measures to complete it in time. The event-governing bodies could scale down the event by reducing the number of athletes

and sports, the number of media, or the number of visitors. Reducing the number of visitors appears to be the most viable option, while specific sports or events could be included on a rotational basis or made to share venues.

Incremental Changes

Seek Public Participation Beginning in the Bid Stage. Citizen involvement reduces the risk that mega-event priorities will take precedence over urban development priorities and ensures that citizens can have a say in mega-event planning. Public hearings and planning consultations with stakeholders, as Vancouver held for the 2010 Olympic Games, not only facilitate a better alignment of infrastructure with citizen needs but also build consensus and reduce potential opposition. Organizers or citizens can call a public referendum (in jurisdictions where legislation provides for this) to let the population decide whether or not to host the event. Thus, the promoters of Boston's bid for the 2024 Summer Olympics decided to organize a referendum after public support had dropped to just 36% (Seelye, 2015).

Fix Terms of Hosting Agreement at the Time of Bidding. Hosts should avoid signing any contracts that leave requirements deliberately vague or that postpone concrete specifications to a later stage. This vagueness makes it difficult for cities and countries to plan and budget in advance. Oslo, in its bid for the 2022 Winter Games, successfully insisted that the IOC would not retroactively introduce new requirements that would lead to higher costs for the city (Butler, 2014).

Create a Separate Organization in Charge of Legacies. A separate organization must ensure that what is left after the event—the so-called legacies—contributes to the long-term development of a city and region. This organization should be created at the bid stage and have a say in all matters of planning that reach beyond the event. This activity should have clear funding sources at the time of the bid. London has such an organization, but it was created after the bid was won; Vancouver's comparable organization only had responsibilities for the the social dimension of legacies.⁶

Decentralize the Event. It makes more sense to spread demand spatially rather than build permanent facilities to accommodate peak demand. Events that take place in one city mean a few days or weeks of intense strain for public transport and accommodation. Instead of building many venues in the same place, venues should be distributed across a city or perhaps even to other cities. Los Angeles in 1984 and Vancouver in 2010 practiced such a decentralized

model and thus avoided building excessive transport capacity (see Liao & Pitts, 2006).

Build Temporary Structures Where Afteruse Is Uncertain. Building temporary facilities such as sports venues can both be cheaper than building permanent facilities and eliminate maintenance costs after the event for facilities that are hardly used or would otherwise be too large. Construction costs of temporary venues are between one-half and two-thirds of those of permanent venues (Long, 2013). London made extensive use of temporary venues for the 2012 Summer Games, where organizers built 11 of the 34 competition venues as temporary structures from scratch (May & Cardwell, 2012). There is, however, a drawback to temporary structures: They increase event-specific expenditure that is unproductive for urban development, so hosts must weigh the costs and benefits in each case.

Engage in Knowledge Exchange. Better knowledge exchange among past and future hosts can alleviate uncertainty in the demand for infrastructure and services during the event. It can also avoid reinventing the wheel where efficient solutions are available elsewhere, thus reducing budget and time overruns. While the IOC and FIFA have started knowledge transfer programs, these are focused on the organizing committees, which are in charge of the operation of the event. To be effective, however, such programs also have to encompass the organizations responsible for delivering the infrastructure and other services for the event.

Do Not Bypass Regular Planning Procedures. Regular planning procedures should remain in force for mega-events, even though their fixed deadlines increase time pressures. These procedures exist to ensure equal consideration of interests, rational decision making, and fair tendering and bidding. To override regular procedures increases the risk of nontransparent decisions that favor certain stakeholders over others.

Conclusion

In this study, I make the case that there is a discernable mega-event syndrome: a set of seven major symptoms that afflict mega-event planning. Together, these symptoms too often turn mega-events into obstacles rather than boons to urban development. The mega-event syndrome results in oversized or obsolete infrastructure for an inflated price that the public is forced to pay and in an uneven and inefficient allocation of resources. These symptoms repeat themselves, to a greater or lesser degree, in mega-events

around the globe. I suggest some incremental changes that can improve the outcomes of mega-events for local hosts, but the more marginal changes can only go so far in reducing the negative impacts on hosts.

Radical changes to the rules of the games—in how mega-events are planned, awarded, and governed—are needed. These more radical changes may require outside pressure from a critical public, social movements, NGOs, the media, or corporate sponsors. In recent years, we have witnessed an escalating spiral in which ever-greater requirements and costs for mega-events have compelled cities to promise ever-greater projects. The most important radical change cities could adopt is to stop bundling mega-event planning with large-scale urban development, which comes with a higher risk of cost overruns, substandard construction quality, oversized infrastructure, and a lack of democratic participation. Tying development projects to mega-events makes the already complex planning for mega-events even more complex because it increases the number of interdependent elements.

There has been a marked decline in communities willing to host mega-events driven by the record of recent mega-events that provided limited benefits at exorbitant costs, such as the 2014 World Cup in Brazil and the 2014 Winter Games in Sochi. The 2022 Winter Olympics have turned into the “Games that no one seems to want” (Wilson, 2014), after Munich, Oslo, Stockholm, St. Moritz/Davos, Krakow, and Lviv refrained from submitting bids or withdrew them. The remaining two contenders in the race—Kazakhstan and China—could portend the future of mega-events as lavish image projects in resource-rich, autocratic states with little public accountability and limited freedom of speech. The bids for the 2024 Olympic Summer Games and the 2026 Football World Cup are now under way, and the United States stands a high chance of winning both if it decides to bid. Debates and actions to counteract the mega-event syndrome must start now, early in the bid phase, when the basic parameters can still be changed.

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Notes

1. Event-governing bodies argue that the use of public funds for non-sports-related infrastructure, such as for transport or communications, should be seen as investment and thus not counted as costs of a mega-event. This line of argument, however, is only partly correct. The problem is that, as seen before, mega-events may change what infrastructure is built—what is required for the event and not what has the greatest public utility—and its size. In addition, mega-events inflate the price tag for infrastructure through the mechanisms discussed in Symptom 2. As such, the public still risks paying for overpriced but underused infrastructure.
2. The displacement of 700,000 residents in the run-up to the 1988 Olympic Games in Seoul and more than a million residents for the 2008 Beijing Olympic Games, however, must also be seen as situations where events were part and parcel of a larger redevelopment strategy and thus not the only driver and cause of displacement (Davis, 2011).
3. However, as mentioned earlier, some elites profit from this inefficient allocation of resources, so there is an incentive for them to overbuild. Some policy changes discussed later in this study can reduce this incentive.
4. In 2003, the IOC published a report condemning the growing size of the Olympic Games and issued more than 100 mostly operational recommendations to counteract this trend (Olympic Games Study Commission, 2003). The IOC also asks for bid books to detail how Olympic planning fits into the long-term development plans of the host, and IOC members are asked to take this into account when voting for a host. Beginning in 2001, it standardized the organization of the event and introduced a knowledge transfer system to make organizational processes more efficient. Despite past reforms, however, the IOC has been unable to reverse, stop, or even noticeably slow the growth of the Olympics (Chappelet, 2014). The Olympic Agenda 2020, passed in December 2014, steps up efforts to enhance transparency, reducing the cost and size and maximizing the use of existing or temporary infrastructure. It yet has to show whether it can be more effective than its predecessors.
5. As an adverse effect, this implication may encourage investments into infrastructure in anticipation of increasing chances to win an event, but these investments would then occur without the fixed deadline of the event, the state of legal exception, and a number of other symptoms, and it would be harder to justify event-specific expenditure vis-à-vis citizens if an event has not been awarded.
6. The IOC has recognized the need for keeping the terms of the hosting agreement stable and for decentralization in its Agenda 2020, adopted in December 2014 (Recommendation 1).

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