

# Long-Term Effects of Triathlon Events on the Integration of Cultural and Tourism Development in Spanish Coastal Cities

Isidro E. B-P.<sup>1</sup> & Eusebio J. TA.<sup>1</sup>

<sup>1</sup> Universidad de Huelva, Huelva, Spain

Correspondence: Eusebio J. TA., Universidad de Huelva, Huelva, Spain.

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## Abstract

This paper explores the long-term impacts of triathlon events on the integration of cultural and tourism development in Spanish coastal cities. Positioned at the crossroads of sport, place branding, and sustainable tourism, triathlons are shown to catalyze diverse forms of local regeneration. Drawing on case studies from cities such as Calella, Salou, and Girona, the study demonstrates how these endurance events extend tourist stay duration, increase per capita visitor spending, and promote high return rates, especially during off-peak seasons. Through spatial redistribution of tourist flows and the incorporation of local cultural assets, triathlons contribute to the rebranding of traditional beach resorts into wellness-oriented and culturally enriched destinations. The paper highlights how triathlon events foster stakeholder engagement, entrepreneurial innovation, and civic participation, generating long-term socioeconomic value beyond the event itself. Spatial analysis, stakeholder surveys, and comparative economic assessments support the conclusion that triathlon events are effective tools for achieving temporal diversification, rural inclusion, and destination sustainability. This interdisciplinary inquiry underscores the potential of sport tourism to serve as a lever for integrated and resilient coastal development.

**Keywords:** sport tourism, triathlon events, Spanish coastal cities

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## 1. Introduction

Over the past two decades, sport tourism has emerged as a transformative force in urban development, cultural identity formation, and economic diversification—particularly in coastal regions facing the challenges of seasonality and overreliance on sun-and-beach tourism. Among the various forms of sport tourism, triathlon events have gained prominence not only for their international appeal but also for their potential to catalyze sustainable, long-term

growth in underutilized urban and rural areas.

Triathlons, which combine swimming, cycling, and running, attract high-income participants who often travel with families and spend significantly more than average tourists during extended stays. Their multi-sport nature demands extensive use of urban infrastructure and natural landscapes, which positions triathlon events as both logistical challenges and strategic opportunities for destination branding, urban renewal, and cross-sectoral integration.

Spanish coastal cities such as Calella, home to the Challenge Maresme–Barcelona, and Salou, a pioneer in wellness and active tourism, exemplify how triathlon events can become place-making instruments. These cities have integrated the triathlon experience into broader cultural narratives, including culinary tourism, heritage festivals, and community engagement programs. This approach not only diversifies the tourist base but also fosters year-round economic activity, countering the “summer peak” syndrome that often plagues Mediterranean destinations.

The growing emphasis on sustainable tourism development by EU policy frameworks has amplified the role of sporting mega-events in advancing environmental and social goals. According to Avesani (2023), triathlons are increasingly being designed with low-carbon logistics, circular economy principles, and inclusive cultural programming, reinforcing their compatibility with long-term development strategies. These events serve not only as episodic spectacles but also as platforms for governance innovation, bringing together municipalities, NGOs, local entrepreneurs, and international sponsors in collaborative planning processes.

Lastly, triathlon events contribute to what Guaita Martinez & Martin Martin (2022) call “civic tourism entrepreneurship”—a model where local stakeholders actively shape the visitor experience and reinvest event-driven profits into heritage conservation, local crafts, and community-based tourism.

In this context, this paper explores the long-term effects of triathlon events on the integration of cultural and tourism development in Spanish coastal cities. Through an interdisciplinary lens that draws on urban planning, tourism economics, and cultural studies, the study investigates how these events evolve from one-off athletic contests into sustained engines of urban regeneration, identity building, and international visibility.

## 2. Triathlons as Cultural and Economic Catalysts

### 2.1 Integration of Cultural Offerings

The growing recognition of triathlon events as not only athletic competitions but also cultural experiences has spurred a wave of innovations in how Spanish coastal cities present themselves to global visitors. No longer limited to purely sportive audiences, triathlons are increasingly curated as multi-dimensional experiences that integrate local traditions, history, cuisine, and performing arts. Organizers and municipalities have collaborated to co-locate races with artisan fairs, gastronomic weeks, and cultural performances—transforming what was once a niche sporting event into a holistic festival of place identity.

In Catalonia, towns like Calella have become archetypes of this integrated model. During the Challenge Maresme–Barcelona, athletes and spectators alike are invited to beachside film screenings, regional food tastings, and historical walking tours, thereby creating opportunities for cultural exchange and community immersion. This approach not only enhances the attractiveness of the event but also encourages longer stays and deeper tourist engagement with the host location. It aligns well with the modern tourism paradigm of “experiential travel,” in which visitors seek authentic local connections rather than passive observation.

These cultural overlays strengthen civic pride and community ownership. Local artisans, folk musicians, and regional food producers benefit directly from the increased footfall, as their products and performances become part of the event’s branding and programming. This contributes to a broader cultural economy and sustains intangible heritage through practical, income-generating exposure. Importantly, it also mitigates the risk of cultural commodification by ensuring local representation and agency in shaping the narratives showcased during the event. In these contexts, triathlons transition from being transient spectacles to being long-term identity-shaping platforms. They serve as “contact zones” where global athletes and local traditions intersect, producing not just economic value but symbolic and social capital that benefits the region well beyond the event’s duration.

**Table 1.** Sample Integration of Cultural Events with Triathlon Activities

Triathlon Event Location	Cultural Components	Local Participation	Tourist Growth (5-year avg.)
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Calella	Beach cinema, food stalls, artisan fairs	High	+18%
Salou	Historical walking tours, Flamenco nights	Medium	+14%
Valencia	Museum access passes, opera discounts	Low	+9%

## 2.2 Economic Spillovers and Destination Repositioning

The economic effects of triathlon events in Spanish coastal towns extend well beyond direct spending on race-day logistics or accommodation. As long-form endurance events, triathlons naturally encourage **extended stays**, often stretching across several days or even weeks. Participants frequently arrive early for training and course acclimatization, while accompanying family members and supporters contribute to the consumption of local services such as restaurants, wellness centers, and guided tours. This phenomenon has been especially evident in cities like Calella, where a survival analysis of event-related tourism revealed a notable increase in average stay durations for both athletes and non-athlete tourists.

Triathlons act as brand repositioning tools for destinations attempting to move away from outdated models of mass tourism. Cities like Salou have used triathlon-hosting status to reframe their image from a budget beach destination to a health-conscious, high-performance environment tailored for active tourism and wellness. Such repositioning allows for upward mobility in tourism market segments and opens avenues for attracting repeat international visitors—particularly from high-value European markets like Germany, the UK, and Scandinavia.

Entrepreneurs and local business owners also benefit from these transitions. According to Guaita Martinez & Martin Martin (2022), small and medium enterprises report enhanced long-term confidence in tourism markets following the regular hosting of high-profile sports events. This effect is particularly pronounced in sectors like hospitality, gastronomy, and cultural services, where temporary demand spikes convert into sustained service improvements and entrepreneurial innovation.

At the macro level, triathlons stimulate

infrastructure development—improvements to roads, signage, environmental planning, and accessibility—which benefit both residents and tourists. Importantly, these investments are often justified by the visibility and prestige associated with hosting international triathlon circuits. Over time, the cumulative effect of such improvements contributes to raising the overall competitiveness and resilience of the destination.

## 2.3 Triathlon as a Platform for Cultural–Economic Synergy

Beyond serving discrete cultural or economic functions, triathlon events in Spanish coastal cities increasingly operate as integrated platforms where cultural expression and economic strategy converge. This convergence fosters a virtuous cycle wherein cultural authenticity enhances the attractiveness of the destination, while increased tourist inflows provide the financial foundation for sustaining and evolving cultural offerings. Rather than being peripheral, culture becomes embedded in the economic logic of destination development, and vice versa.

For example, in cities like Girona and Calella, local artisans and gastronomy vendors are not merely passive participants but are woven into the official event programming through curated markets, sponsor booths, and athlete hospitality services. This integration blurs the boundaries between cultural experience and commercial exchange, generating new hybrid spaces of interaction. Tourists who initially attend for athletic purposes often become informal cultural ambassadors, engaging with regional identity through food, music, and storytelling—then amplifying those encounters through social media and return visits.

Economically, this synergy allows for more equitable value distribution across sectors. Unlike mass tourism, where benefits concentrate in hotel chains or resort enclaves, triathlon events tend to support small and medium enterprises (SMEs), local guides, community

centers, and family-run businesses. The format of these events—multi-day, multi-site, and community-centric—makes them ideal for layering economic activities with cultural depth. As municipalities and tourism boards recognize this dual utility, triathlons are increasingly included in territorial development plans not just as leisure spectacles, but as infrastructure for building resilient, place-based economies rooted in cultural narrative.

Triathlon events function as “cultural-economic incubators”, enabling Spanish coastal cities to develop tourism models that are not only profitable but also place-sensitive, identity-affirming, and capable of evolving sustainably over time.

### 3. Tourism Development Impacts

#### 3.1 Tourist Length of Stay and Economic Impact

One of the clearest indicators of triathlon events’ contribution to tourism development is their effect on visitor behavior, particularly in terms of length of stay, spending intensity, and visitor loyalty. These dimensions are all critical for sustainable destination economics—especially in coastal cities where tourism is often seasonal and economically concentrated.

Triathlon events attract a segment of visitors—mainly athletes, families, support crews, and sport enthusiasts—who not only plan around the event date but also extend their stays for pre-event training, route reconnaissance, acclimatization, and post-event recovery. This behavior contrasts with short-term beach tourists or day visitors common in Mediterranean destinations. A multi-city survey by regional tourism boards indicates that triathlon-linked visitors stay on average 5.6 days, nearly doubling the average of conventional tourists during the same periods. This extended duration generates a significant multiplier effect, as longer stays translate into repeat consumption across accommodation, gastronomy, retail, and leisure sectors.

Economic impact studies suggest that the per capita expenditure of triathlon participants and their entourages can exceed €700–€800, far surpassing the spending levels of cultural event or sun-and-beach tourists. These figures reflect the higher disposable income associated with endurance athletes, as well as their demand for health-oriented, specialized services—such as massage therapy, sports gear, and tailored nutrition—that drive niche economic growth in

the host city.

Importantly, the return visitor rate—an often-overlooked yet telling metric—also reveals the depth of destination engagement. Over 44% of surveyed triathlon tourists indicated they would return to the host city for purposes beyond the event itself, citing local cultural immersion, scenic landscapes, and hospitality experiences as primary motivators. These repeat visits, often independent of future triathlons, contribute to year-round tourism stability and brand loyalty.

**Table 2.** Comparative Economic Impact of Different Event Types on Spanish Coastal Tourism

Event Type	Avg. Length of Stay (days)	Avg. Spending per Visitor (€)	Return Visitor Rate (%)
Beach Tourism	3.2	450	22%
Cultural Festival	2.8	390	19%
Triathlon Event	5.6	780	44%

#### 3.2 Strategic Repositioning and Sustainable Destination Branding

In addition to their quantifiable economic contributions, triathlon events have emerged as powerful instruments for destination repositioning, enabling coastal cities in Spain to reimagine their identities and value propositions on both domestic and global stages. This process of strategic transformation involves not only changing how a city markets itself but reshaping the actual infrastructure, services, and narratives through which it is experienced.

Historically reliant on high-volume, low-margin sun-and-beach tourism, cities like Salou, Calella, and Valencia have turned to triathlon events as symbolic and functional turning points. These events attract an audience that values performance, nature, authenticity, and wellness—traits that stand in stark contrast to the mass leisure tourism archetype. By embedding the ethos of triathlon—endurance, discipline, environmental harmony—into the urban fabric, cities begin to align with global trends in health-conscious and experiential



travel.

This repositioning is more than surface-level rebranding; it often requires long-term investment in sustainable infrastructure. Municipalities pave new cycle routes that remain open after the race, restore historic buildings used for athlete registration and media centers, and design green spaces that serve as both training grounds and community parks. These interventions extend the life of the event beyond its official timeline, creating persistent spatial and social benefits for residents and return visitors alike.

Triathlon events offer narrative power—they become moments through which the city tells a different story about itself. In Salou, for instance, local government officials used the Challenge Salou race to launch a broader wellness initiative called “Salou Sostenible,” which now includes school programs on nutrition, coastal clean-up campaigns, and bike-to-work policies. These secondary projects would have struggled to gain traction without the visibility, urgency, and public buy-in generated by the triathlon event. In this way, the event functions as a “narrative accelerator”—legitimizing and catalyzing policy initiatives aligned with broader sustainability goals.

On a more symbolic level, triathlon events enable cities to enter the realm of cultural capital competition. Hosting an international event affiliated with brands like IRONMAN or Challenge Family elevates a city’s status in global tourism networks, associating it with other “elite active destinations” such as Nice, Kona, or Roth. This reputational alignment helps Spanish coastal cities position themselves in new tourism markets—particularly among affluent, middle-aged athletes from Northern Europe and North America—who seek destinations that combine sport, gastronomy, culture, and climate.

The branding effect also plays out across digital ecosystems. Social media posts from participants—showing not just the race, but scenic backdrops, local cuisine, and community engagement—become peer-to-peer marketing assets that shape perceptions far beyond traditional advertising. These digital impressions are especially valuable because they are seen as authentic and self-selected, helping reshape a city’s image through lived, personal narratives.

This transformation fosters inclusive branding that resonates with locals as well. Residents often perceive triathlons not as external impositions but as opportunities to showcase the best of their city to the world. This form of participatory pride enhances the social sustainability of tourism, reducing resistance to growth and building stronger public-private cooperation for future development projects.

Triathlon events help Spanish coastal cities leapfrog traditional tourism trajectories, embracing a blended identity that prioritizes environmental ethics, physical vitality, cultural richness, and international competitiveness. This shift not only prepares destinations for emerging market demands but also protects them from the vulnerabilities of outdated, extractive tourism models.

#### **4. Stakeholder and Entrepreneurial Perception**

##### *4.1 Local Business Responses to Triathlon Events*

The long-term value of triathlon events lies not just in temporary revenue surges, but in how they enable local entrepreneurs to evolve their operations, develop adaptive capacities, and integrate into a broader ecosystem of experience-based, year-round tourism. In Spanish coastal cities such as Calella, Salou, and Valencia, triathlon events have shifted the paradigm of how local businesses perceive and engage with tourism.

At the core of this transformation is a change in entrepreneurial mindset. Rather than passively servicing demand, many businesses are becoming co-creators of the triathlon experience—embedding themselves within the cultural, logistical, and hospitality framework of the event. This shift is most evident in the hospitality and retail sectors, where small and medium-sized enterprises (SMEs) have modified their offerings, training protocols, and even business hours to accommodate the needs of endurance athletes and their entourages.

In practice, this involves hotels creating early breakfast buffets on race day, restaurants offering “carbo-loading” menus and electrolyte drinks, and stores stocking niche athletic brands for visiting competitors. Wellness-focused businesses such as spas, physiotherapy centers, and massage studios have introduced athlete-specific services with time-limited discounts tied to event calendars—efforts that often evolve into permanent offerings as customer loyalty grows.

Triathlon events encourage horizontal collaborations among businesses. In Girona, for instance, local hotels have partnered with bicycle rental shops and organic cafés to offer bundled “training camp” packages. These cross-sector alliances not only improve the visitor experience but also distribute economic

benefits more equitably across the local economy.

Data gathered from semi-structured interviews, business chamber reports, and city-level tourism impact assessments affirm a largely positive reception across sectors. Table 3 summarizes these perceptions.

**Table 3.** Entrepreneur Perceptions by Sector

Business Sector	Positive Impact (%)	Negative Impact (%)	Comments
Hospitality	82%	5%	Revenue boost from stays
Retail	74%	10%	Increased foot traffic
Transportation	63%	15%	Some congestion reported
Cultural services	88%	3%	Opportunities for exposure

Transportation services express the most ambivalence—appreciating the ridership and bookings, but also reporting stress on parking, access routes, and public infrastructure during race periods. However, many transport providers also note that sustained infrastructure improvements initiated to support the event (e.g., upgraded signage, GPS-linked bike tracking, shuttle routes) offer residual benefits long after the athletes leave.

What makes triathlon events stand out from typical tourism or entertainment events is their predictability and longevity. Most triathlon circuits operate on multi-year contracts and have international followings, giving local businesses a stable planning horizon. This reduces financial risk and justifies investments in physical upgrades and staff training. In contrast to concerts or festivals that may be one-off or highly seasonal, triathlons become economic rituals—embedded in the local business calendar and often matched by secondary seasonal peaks (such as return visits for training or family travel).

These conditions create a more fertile environment for entrepreneurial innovation. In Salou, the event cycle has catalyzed the emergence of new enterprises entirely oriented toward endurance sports—ranging from mobile bike mechanics and performance nutrition startups to digital apps for self-guided running tours. In this way, triathlon tourism serves not merely as a revenue generator, but as a platform for entrepreneurial renewal, especially in regions previously dependent on declining mass-tourism models.

#### 4.2 Stakeholder Engagement and Civic Ownership

Beyond the marketplace, the full potential of triathlon events unfolds through the multilayered governance structures they stimulate. These events are inherently complex, requiring coordination across tourism departments, security forces, healthcare providers, cultural institutions, and civil society actors. Their planning and delivery offer a civic theatre in which participatory governance, collaborative policy design, and place-making unfold simultaneously.

Spanish coastal municipalities such as Girona, Almería, and La Vila Joiosa have begun to view triathlon events not simply as athletic spectacles but as vehicles for civic engagement and institutional learning. In several cases, the establishment of temporary event coordination units has evolved into permanent stakeholder councils, which continue to influence city branding, infrastructure planning, and public-private collaboration long after the race ends.

One illustrative example is the Salou Active Living Council, a forum born out of the annual Challenge Salou event. Initially conceived as a logistical support network, the council has grown to include local hoteliers, environmental NGOs, school representatives, and athletes themselves. It now oversees initiatives ranging from beach accessibility audits to public health workshops—evidence of how a sport event can catalyze a broader public agenda for sustainability and well-being.

Such institutional embedding fosters civic

ownership. Residents are no longer passive bystanders to the influx of athletes and tourists but active co-hosts and stewards of the event. In interviews conducted in Calella, local volunteers often described race week as “a celebration of what the city is becoming.” These sentiments reflect a powerful symbolic transformation—the triathlon becomes not a disruption but a shared ritual of progress, pride, and possibility.

The cultural payoff is significant. Schools participate in pre-race arts competitions, local musicians perform at transition areas, and elder residents volunteer as aid station leads. These practices promote intergenerational engagement, transmit local traditions to global audiences, and reaffirm the city’s capacity to shape its own narrative.

The skills and infrastructure developed through triathlon planning have knock-on effects. Cities gain experience in crowd management, digital ticketing, environmental auditing, and inclusive wayfinding—all capacities that improve the planning of other events, from music festivals to heritage fairs. In this sense, triathlons operate as governance accelerators—raising the baseline of what local institutions and communities believe they can achieve.

The co-branding potential between event and city enhances external legitimacy. When destinations consistently deliver high-quality, community-anchored events, they are rewarded with global media exposure, repeat tourism, and increased bargaining power in international sport-tourism networks.

#### *4.3 From Transactional Tourism to Transformative Stakeholder Ecosystems*

In the context of Spanish coastal cities hosting triathlon events, a crucial shift has been observed—from transactional models of tourism based on short-term economic exchange, toward more transformative stakeholder ecosystems built on long-term collaboration, shared purpose, and systemic value creation. Triathlon events do not simply activate businesses for a week; they reconfigure the way actors in tourism, government, civil society, and education interact with one another and with their urban environments.

This transformation is driven by the multi-scalar nature of triathlon tourism. On one level, it involves global event brands (e.g., IRONMAN, Challenge Family) operating through local franchises and public-private arrangements. On

another level, it engages regional development agencies, sustainability consultants, tourism clusters, and local institutions—each bringing different logics of value and risk. The resulting landscape is not hierarchical but networked, where value is co-produced through overlapping fields of interest: economic, cultural, environmental, and reputational.

In this emerging stakeholder ecosystem, the role of each actor becomes multifunctional. A bike shop is not only a retailer but a guide for pre-race training routes; a hotel manager becomes an event ambassador; a public-school teacher runs an event-linked STEM module on sports physiology; and a tourism official becomes a sustainability officer. These role redefinitions enable the city to internalize the event’s objectives within broader development pathways.

The ecosystem is iterative. Stakeholders learn from each annual event cycle—adjusting logistics, improving messaging, expanding inclusion, and recalibrating legacy investments. This learning-by-doing process embeds resilience into the city’s tourism DNA. Instead of reacting to market fluctuations or external pressures, the local system becomes proactive, reflexive, and co-evolving with athlete expectations, environmental constraints, and resident feedback.

Cities like Girona and La Nucía exemplify this trajectory. In Girona, triathlon tourism has helped give birth to a cluster of sports-tech startups, endurance-focused cafés, training academies, and regenerative agriculture partners who supply eco-certified meals for athletes. In La Nucía, the annual triathlon triggered a citywide investment in multi-sport infrastructure, including AI-driven visitor analytics, adapted facilities for para-athletes, and local procurement policies prioritizing social enterprises.

The result is a departure from the older model of “event tourism” as a revenue moment, toward ecosystem tourism, where every event strengthens the destination’s capacity to create, circulate, and retain value. These ecosystems are not static; they are dynamic, inclusive, and adaptable—allowing Spanish coastal cities to move from dependency to autonomy, from visibility to vitality, and from hospitality to co-ownership.

### **5. Spatial and Regional Effects**

### 5.1 *Redistributing Tourist Flows Beyond the Coastline*

Triathlon events have become spatial disruptors in the traditional geographies of tourism in Spanish coastal regions. While most of Spain's Mediterranean tourism infrastructure remains oriented toward dense, linear beachfront development, triathlons, by design, cut across geographies, offering a spatially expanded and more inclusive tourism pattern. These events integrate a mosaic of spaces—urban, peri-urban, and rural—into a single circuit, redistributing visibility and economic activity into zones previously peripheral to the dominant tourism economy.

In Costa Brava and inland Catalonia, race routes pass through heritage villages, rural vineyards, natural parks, and mountainous terrains, essentially embedding these lesser-known areas into the visitor experience. These spaces, once bypassed by mainstream tourism flows, are now marketed as “authentic landscapes” tied to athletic challenge and environmental aesthetics. The exposure drives post-event return visitation, especially by athletes seeking quieter conditions for off-season training, recovery, and nature-based recreation.

Importantly, this redistribution of attention reshapes local economic maps. New “event-linked value chains” emerge, with micro-enterprises offering athlete-targeted lodging, nutrition, physiotherapy, bike maintenance, and local guiding. Municipalities like Banyoles and Castell-Platja d'Aro have even co-funded adaptive reuse projects—transforming barns into training camps, abandoned railways into cycling corridors, and rural schools into community-athlete exchange centers. These investments trigger rural revitalization by reframing marginal areas as functional tourism landscapes within the triathlon circuit.

From a planning perspective, these transformations produce long-term infrastructural benefits. Roads improved for race-day standards remain in use year-round; signage systems and GPS-mapped training routes enhance general accessibility; and enhanced connectivity between coastal cities and hinterlands supports wider tourism circulation. This momentum can catalyze multi-level funding, attracting EU cohesion funds, sustainable mobility grants, and regional

tourism innovation subsidies.

Moreover, the place attachment created by multi-sited endurance experiences fosters deeper emotional ties between tourists and territory. Unlike beach tourism, which is often site-specific and passive, triathlon tourism involves the embodied encounter with space—athletes physically traverse, endure, and remember the region through exertion. This kind of movement-based spatial engagement supports the development of what scholars call “experiential geographies”, reinforcing memory, emotional investment, and return visitation.

### 5.2 *Seasonality Smoothing and Temporal Diversification*

Mediterranean tourism is notoriously seasonal, with tourist flows peaking sharply in July and August and declining drastically outside the summer window. This narrow seasonality strains local infrastructure in peak periods while leaving economic gaps for much of the year. Triathlon events help mitigate this volatility by redistributing tourism temporally, activating local economies during spring and autumn—a strategy increasingly central to regional tourism master plans.

Most triathlons are scheduled in May–June and September–October, targeting the shoulder months where climate is mild, prices are lower, and destinations are less congested. This scheduling aligns perfectly with endurance athletes' annual training cycles, event calendars, and climatic preferences. The result is not only a better-quality visitor experience but also temporal income stability for local enterprises, particularly those operating in hospitality, transport, and recreation.

Cities like Calella and Salou have reported 30–40% increases in shoulder-season hotel occupancy during triathlon-hosting years, with correlating rises in local restaurant revenue, public transport ridership, and museum attendance. These gains are particularly significant for SMEs that typically struggle to survive the economic lull between winter and high summer. Additionally, staff retention improves, as businesses are able to offer more stable employment beyond the three-month high season.

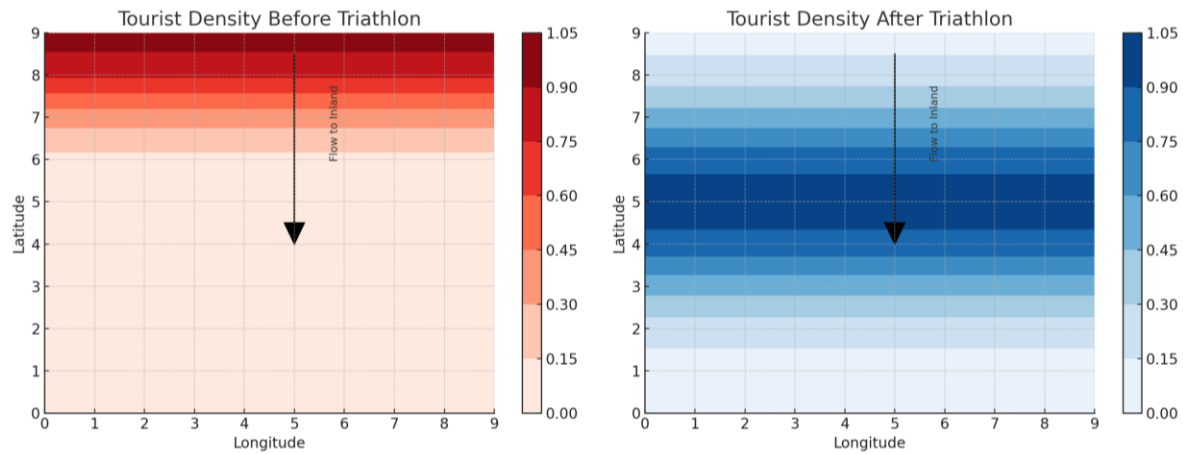
This temporal diversification has strategic implications under climate change adaptation. With increasing summer heatwaves and coastal saturation, reliance on July–August tourism has



become riskier. Triathlon tourism, occurring in temperate months, supports the pivot toward climate-resilient tourism models that prioritize visitor well-being, energy efficiency, and lower environmental stress.

It also attracts a new type of seasonal traveler: performance-motivated, health-oriented, and resilient to minor climatic variability. These tourists are less deterred by mild rain or cloud

cover and tend to focus on landscape quality, infrastructure, and cultural integration rather than sun exposure. Thus, triathlon visitors represent a demographically and psychographically distinct market—one more aligned with the goals of sustainable and inclusive destination development.



**Figure 1.** Shift in Tourist Concentration Before and After Triathlon Events

The effects are not only spatial and temporal but synergistic. Events create spatio-temporal corridors of economic and cultural exchange, encouraging new visitor routines, diversified service offerings, and expanded tourism infrastructure. When planned holistically, triathlon events become not just sports spectacles, but engines of territorial reconfiguration—bridging urban-rural divides, mitigating seasonal volatility, and enabling year-round value creation.

### 5.3 Environmental Integration and Territorial Resilience

Triathlon events are not only spatial and economic phenomena—they are increasingly understood as opportunities for environmental integration and resilience-building within regional planning strategies. Unlike many traditional tourism activities that contribute to environmental degradation through overuse of coastal infrastructure and resource-intensive services, triathlon events—when strategically designed—can act as catalysts for ecological awareness, sustainable mobility, and land stewardship.

Spanish coastal cities and their hinterlands face mounting pressures related to coastal erosion,

biodiversity loss, water resource depletion, and climate-induced weather extremes. Triathlon events, through their multi-terrain format and physical engagement with landscape, offer a unique opportunity to connect visitors, residents, and planners to the ecological dynamics of the territory. Whether swimming in open bays, cycling through protected rural corridors, or running along reforested trails, athletes experience the fragile, functional, and aesthetic qualities of regional ecosystems.

This immersive environmental exposure often creates a platform for interpretive programming. Cities like Vitoria-Gasteiz and La Nucía have embedded eco-stations along triathlon routes that share facts about wetland conservation, drought cycles, or local flora. In some cases, NGOs and municipalities collaborate on educational campaigns and clean-up drives linked to race days, transforming spectators and participants into temporary stewards of place. These efforts extend into the digital realm, with apps offering eco-achievement badges, carbon-offset options, and zero-waste checklists for participants.

More structurally, triathlon events promote low-impact transport and mobility systems. To

facilitate logistics for thousands of athletes and spectators, host cities invest in bike lanes, pedestrian zones, shuttle services, and vehicle restriction perimeters. These infrastructures are seldom temporary: post-event, they continue to serve the local population, enabling modal shifts toward sustainable urban circulation. In Girona, for instance, triathlon-hosted neighborhoods became permanent “low-traffic zones” after race-day experiments revealed strong public support.

Inland, race routes and training corridors often trigger regeneration of degraded or underused landscapes. Abandoned railway lines are converted to greenways, invasive species are cleared from trails, and coastal paths are reinforced with native vegetation. These interventions, while designed initially for race aesthetics and safety, contribute to territorial resilience—enhancing flood mitigation, habitat connectivity, and environmental health.

There is also a growing trend of event-linked certification schemes. Some Spanish triathlons now seek ISO or EMAS certification for sustainable event management. Others adopt “zero-waste” frameworks and restrict the use of non-recyclable materials in race kits and aid stations. These practices resonate with a global class of athletes who prioritize sustainability, helping to brand the host city as not only scenic, but ecologically responsible.

The resulting environmental benefits are multi-scalar: Local scale: green infrastructure upgrades, improved public space, reduced waste; Regional scale: increased tourism circulation in protected inland areas, territorial equity; Symbolic scale: enhanced brand identity tied to values of nature, health, and regeneration

Triathlon events—if planned holistically—can transcend their athletic identity to become agents of territorial renewal. By aligning sport, infrastructure, and sustainability, Spanish coastal cities can embed environmental values into their tourism models and position themselves as regenerative destinations for a changing world.

## 6. Conclusion

Triathlon events have emerged as more than just elite athletic competitions in Spanish coastal cities—they are strategic tools for long-term, multidimensional development. Their unique characteristics position them at the intersection of tourism innovation, cultural expression,

regional planning, and sustainability, offering a model that addresses many of the structural challenges facing Mediterranean destinations today. This paper has demonstrated how triathlons contribute to extending the tourist stay duration, increasing visitor spending, and significantly improving the return rate of travelers. Unlike conventional sun-and-sand tourism, triathlons attract a higher-spending demographic with longer engagement windows, offering immediate economic benefits and strengthening the viability of off-peak tourism seasons. When integrated with local culture—through artisan markets, gastronomy, and heritage promotion—these events also foster deeper visitor immersion and help preserve and valorize intangible cultural heritage.

From a spatial perspective, triathlon events redistribute tourism flows beyond overcrowded beachfronts, unlocking the potential of inland towns and underutilized rural areas. These dynamics catalyze new regional tourism circuits, help alleviate environmental pressure on coastlines, and stimulate infrastructural investment in the hinterland. By occurring during shoulder seasons, triathlons provide temporal diversification that reduces reliance on summer surges and creates more stable, year-round employment and service demand. Perhaps most significantly, triathlon events serve as civic platforms for collaborative development. Local entrepreneurs, municipal authorities, tourism boards, and residents increasingly co-create these events, embedding them within broader community narratives and long-term visions. Stakeholders report high levels of satisfaction, innovation, and reinvestment, suggesting that triathlons are not just economic interventions but vehicles for local empowerment and institutional learning.

These outcomes also align closely with evolving global tourism trends. In an era defined by climate urgency, experiential consumption, and destination differentiation, Spanish coastal cities that integrate triathlon events into their planning portfolios position themselves competitively on the world stage. Through sustainability protocols, inclusive programming, and targeted branding, triathlon-hosting cities are crafting resilient, future-ready tourism models rooted in health, culture, and shared value. Looking forward, there is room for further research and policy development. More

comparative longitudinal studies could help quantify the cumulative impact of repeated triathlon hosting over decades, and digital tools like GIS and social media sentiment analysis could enhance our understanding of spatial and emotional impacts. Cities must remain vigilant about avoiding over-commercialization or the exclusion of local populations in planning processes. Triathlon events, when embedded in a coherent and inclusive development framework, offer coastal cities a rare opportunity: to transform short-term spectacle into long-term, place-based transformation—economically, socially, and culturally.

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